THE LONDON

Medical, Surgical, and Pharmaceutical

REPOSITORY.

No. 11. NOVEMBER 1, 1814. Vol. II.

PART I.

ORIGINAL COMMUNICATIONS.

I.

A Case of Ruptured Uterus. By Ralph Blegborough, M. D. of the Royal College of Physicians, London.

(With a Plate.)

On Friday, the 2nd inst. I was requested to meet Mr. Miessner of Cloak Lane, Surgeon, to consult on the case of Mrs. Pope, of York Street, Blackfriars, who had been in labour during the two preceding days. We met at nine o'clock in the evening; and having attentively made the usual examination, I found the projection of the sacrum so considerable, that there was not more than an inch and a half between it and the symphisis pubis. The patient was thirty-three years of age, and this was her first pregnancy. Mr. Meissner having previously made himself acquainted with the exact state of the parts, we retired for the purpose of deciding what was incumbent on us to do in a case so truly melancholy.

To the best of our recollection, one case, or at most two cases only of the cæsarean operation, out of nearly forty which have been performed in these dominions, had succeeded; and as it had been asserted, but with what truth I know not, that a Dr. Kelly had delivered at the full period of utero-gestation, where the sacrum and pubis were one inch and five eighths only distant from each other; we instantly determined to lose no time, but immediately to attempt to deliver her in the same manner. In such cases, the child must necessarily perish; and the conviction of this truth will always lessen the distress which every operator must experience on similar occasions.

About ten o'clock therefore, Mr. Miessner having emptied the bladder, I passed two fingers of my left hand into the uterus, and with great difficulty, insinuating the perforator between them, penetrated the suture; when, being assisted by Mr. Miessner's accurate and discriminating judgment, a great portion of the brain was broken down and evacuated. As the patient now became faint, we gave her thirty-five drops of laudanum and left her for the night.

The next morning we called about seven o'clock. The patient had passed a tranquil night, with little pain, but had unfortunately given herself up to the guidance of a female friend, who, in a very flippant, dictatorial manner, gave us to understand, that no farther attempts were to be made towards relieving the patient from her dreadful situation. We did, however, before leaving her, so far prevail over her prejudices, that Mr. Miessner procured the opportunity of ascertaining that every thing remained exactly as we had left it the preceding evening.

At eight o'clock in the evening I again called *alone*, and used every argument in my power to induce the patient and her friends to alter their resolution, but without effect; although it was well known to many of the women present, that a poor unfortunately deformed woman in the neighbourhood had five times been extricated from a situation, which must have appeared to them at least as terrible as that before them. This circumstance I did not fail to place in a strong point of view; and it seemed to make a considerable impression on all, except the officious lady, who still retained sufficient influence over the patient, to foil all my well-intended endeavours. As for the patient herself, poor woman! she seemed to possess a capacity very much below mediocrity.

Having heard nothing more of the case all the succeeding day, (Sunday the 4th,) early in the morning of the 5th, I waited on Mr. Miessner for information, when I understood that he had not been more successful than myself in the offer of his services, although he had called repeatedly, as both of us had agreed to do, for the purpose of offering them. I was rejoiced however to find, that there was no personal prejudice against *us*; for the parties had decidedly expressed their satisfaction at every thing we had done; and had declared, on being urged to give an opinion, that if they would have permitted any thing further to be done, our assistance would have been preferred.

On the 6th, at noon, I was waited on by Mr. Pope, the husband of the patient, who told me that his wife had expired at one o'clock that morning; and that Mr. Miessner, from whom he was just come, was about to set off on indispensable

business to the country. Owing to this circumstance, I was deprived of that gentleman's valuable and able assistance in effecting the object which Mr. Pope had in view in his present application to me; viz. that such an inspection of the deceased should be made, as would satisfy a clamour in the neighbourhood, which had arisen from their resisting our assistance.

After stipulating that I should be allowed to make such inspection without restraint, and be permitted to bring away with me whatever parts I pleased, I agreed to his request; and, accompanied by three young gentlemen, Mr. Bruce, the curator of Mr. Brookes's Museum, and Mr. Nicholson and Mr. Lawson, two of his house pupils, I went in the evening to Mr. Pope's house, prepared to make the inspection.

We first carefully dissected off the integuments in all directions, so as to enable us to divide the vertebral column above the insertion of the diaphragm; and then amputated each of the femora about one third below the trochanters. This enabled us to remove the entire cavities of the abdomen and pelvis, together with all their contents *in situ*. By afterwards uniting the integuments of the disjoined parts over proper substitutes for those which had been removed, in such a manner, as left the subject, when placed in the coffin, to all appearance as if nothing had been taken away, the deformity which would have been otherwise produced, was avoided.

On examining the abdomen, it was found that the uterus was ruptured, and that the fœtus had escaped through the laceration into the abdominal cavity, and was lying in contact with the intestines.

My friend Mr. Brookes, the anatomist, by his kind and effectual assistance, has enabled me to give the two annexed views of the subject, taken from casts made under his inspection.

DESCRIPTION OF THE PLATE.

No. 1 represents the abdomen when first opened, with the situation in which the fœtus and placenta were found, escaped from a transverse laceration on the left of the cervix uteri anteriorly. The fœtus is seen lying in contact with the intestines, some convolutions of which appear above. Part of the uterus is distinguished near the feet of the child, and near its head the placenta comes in view.

No. 2 represents, after the removal of the fœtus, placenta, and most of the abdominal viscera, a vertical section of the pelvis, &c. &c. the uterus being somewhat raised to shew distinctly the situation of the laceration in the cervix. The body of the uterus, finely covered with ramifications of the sinus uterini, occupies the middle part of the plate; and the laceration at its cervix is distinctly marked in dark shadow.

OBSERVATIONS.

From the above case, imperfect as it is, some practical inferences may be drawn. These may be arranged under two heads, viz.

1st. That which regards the operative part of the delivery; and

2nd. The proper conduct to be observed towards the family and attendants of the patient, including the propriety of making a full prognosis, in similar cases.

1st. On this part of the subject, although we may lay down general rules, these, it is evident, will admit of some exceptions; for it must occur to every one, that a premature small child may be brought through a pelvis which will not permit a full-sized fœtus to pass. This was the first pregnancy of our patient, and consequently the proper time for inducing labour had been neglected. We were not, however, without hopes, when we proposed the operation, that the patient had not arrived at the full period of utero-gestation; and had, therefore, only to balance the use of the crochet against the cæsarean operation, as no practitioner, I believe, any longer thinks of dividing the symphisis pubis.

M. Baudelocque considered the use of the crotchet inadmissible, when the short diameter of the pelvis measures only one inch and two thirds.

Dr. Osborne delivered, in one instance, where the short diameter was one inch and three quarters, and the longer not more than two inches, by turning the basis of the skull sideways: but, as the patient recovered, he never had the opportunity of clearly ascertaining that the above were the exact dimensions. He was of opinion, however, that the crochet should be tried wherever there was the space of an inch and a half from pubis to sacrum. He concludes his description of the cæsarean operation in these remarkable words:—"There will be but little flooding from the contraction of the uterus: but it will prove as fatal as cutting off her head." The above respectable testimony, therefore, together with the case of Dr. Kelly, which I recollected, from having manuscript notes in my possession of the Lectures of Dr. Osborne, at once guided our determination. I the more readily adopted Dr. Osborne's opinion, from never having allowed myself to make any comparative estimate between the value of the life of the mother and that of the child: and so replete with danger to the former is the cæsarean operation, that no circumstances, I think, can possibly arise, which would induce me to perform it, or sanction its performance.

To those gentlemen who think differently on this subject, I would wish to suggest, that the situation of the laceration of

the uterus in this case, as well as in almost all similar instances, affords a presumption, that, in performing the operation, the incision should be made in the cervix uteri, and not in the place generally directed by our English surgeons. To this, I am aware, it may be objected, that the laceration takes place in the cervix only, owing to its being the thinnest part of the uterus; but I think a little reflection will supply other reasons why the incision in the cervix should be preferred to one corresponding with the first incision through the integuments.

There are, I believe, as I have already hinted, nearly forty instances of the cæsarean operation having been performed in Great Britain; but I have not heard of more than one well-authenticated recovery*. This solitary instance, I think, may be classed with the case of hernia mentioned by Mr. Bell, in which the patient lost at least a foot of intestine; and, nevertheless, without the ends having been attached, perfectly recovered, and subsequently passed the feces by the anus †!— There seems too much *of fortuitous success* in such cases to found any practical inferences upon them; and I must repeat, that, after all the attention I am able to give to the subject, no circumstances, in my opinion, can occur, that will justify the operation. On the contrary, I conceive that the patient even stands a much better chance of ultimate recovery from the constitutional process for expelling the child by inflammation and abscess.

Le Dran relates a case where the uterus was ruptured on the 23d of April: on the 13th of May the placenta was expelled; and on the 16th of the same month a tumor was observed at the linea alba, which was opened and a child extracted. The patient recovered‡. Analogous cases are also related by Astruc, Bartholin, and Bromfield. — In Mr. Birbeck's case the fœtus was discharged at the navel §; and in Dr. Sims's patient the process was in a favourable train, when, from some want of due caution, fatal inflammation ensued‖.

The cæsarean operation, we are informed, has been very frequently performed with success in France. I am, however, unwilling to believe that the French surgeons are so much more dexterous than our own. Mauriceau speaking on this subject, which he treats with great judgment and proper feeling, gives a very remarkable instance of the hyperbolical statements of some of the French surgeons: and I have no

---

* Vide Mr. Barlow's case in Med. Records and Researches, p. 154.

† As extraordinary a case as that of Mr. Bell is related in the fourth volume of the Transactions of the College of Physicians, communicated by Judge Dampier.—Editors.

‡ *Observ. tom. ii. ob. 92.* § *Phil. Trans. vol. xxii. p. 1000.*

‖ *Med. Facts, vol. viii. p. 150.*

doubt that a similar result would be found to attend the investigation of most, if not all the cases related as having been successful, which we have from the same source.

2. Under the second head I would observe, that the forming a prognosis is certainly, for the most part, a matter of much importance; but the declaring it, particularly among such ignorant people as we had to deal with on this occasion, requires some consideration; for I have little doubt that every thing we had said on the subject was told to the patient by her officious friend, notwithstanding our cautions against such conduct. Had we not, I think, given so full a prognosis, by which the attendants were impressed with the opinion that the case was truly hopeless, we might, perhaps, have been permitted to have used farther endeavours towards delivering the patient. Should, unfortunately, any similar case ever occur to me, I shall certainly think it my duty more carefully to endeavour to keep up hope in the patient, and confidence in the attendants; for I own I feel regret that this conduct was not more attended to, as it would have gratified me much to have been able to have recorded another and well authenticated instance of that practice, which, according to Dr. Osborne, succeeded under Dr. Kelly's management.

There is a case of instrumental aid mentioned by Dr. Clough in the last number of the Repository, (p. 274,) which bears a close affinity with that of Mrs. Pope; and I may, perhaps, on a future occasion, detail the result of similar beneficial endeavours, under circumstances of great difficulty and discouragement. I have this day heard, that since he made that ingenious communication, a case of ruptured uterus, similar in many respects to that which is the subject of this paper, has occurred to the Doctor; and that it is his intention to favour the public with an account of it.

I am no friend to the hasty use of instruments; but they may be occasionally employed with infinite advantage; and I consider the state of my late patient, such as to have fully justified me in attempting to save her, by a cautious perseverance in reducing the fœtus, as the only means that promised a reasonable hope of success.

New Bridge Street, Blackfriars, September 1814.

II.

Observations on Theorizing in Medicine, and on Herpes Præputialis. By a Physician.

The present may be considered as a new and auspicious era in the profession. An indefatigable spirit of inquiry has shed a lustre over many important subjects; an eager research

after truth has led to investigations which have elicited valuable facts; and independent thinking has exposed several errors and corrected numerous prejudices. Blood-letting is no longer resorted to with a timid hand; the bugbear debility has lost its principal votaries; purgatives are administered with a temerity warranted by success, and the exhibition of bark and stimulants in fever cannot long survive the mischief they have caused. Yet the disposition to theorize, to elucidate every phenomenon, and to discover the essence of disease, is perhaps too prevalent; and the desire to attain celebrity, to establish new modes of practice, and to deduce bold conclusions from them, is probably exercising a pernicious influence. The world has been recently gratified by a work on the utility of blood-letting in fever*, in which its great success appeared to be evident and indisputable. But an unquestionable and irrefutable document from four respectable physicians†, the author's colleagues in the fever-hospital of Dublin, has publicly proclaimed that he has fallen into "error and mis-statement" in his "important deductions and facts"—"that no proof exists that recovery was rendered more speedy and more perfect by blood-letting"—"that the proportion of deaths to recoveries, was in no inconsiderable proportion *greater* among the patients of Dr. Mills, than among those of his colleagues," and that he has extravagantly exaggerated the efficacy of venesection as "by an induction formed from two thousand two hundred and forty cases, it is proved to exert no influence in rendering the disease less fatal or less protracted‡." It is impossible to reflect upon this statement without experiencing painful and melancholy sensations§. The

* Mills on the utility of blood-letting in Fever, 8vo. 1813.

† Drs. Barker, Stoker, Hagan, and Gamble, of Dublin.

‡ Edin. Medical and Surgical Journal for July, 1814, p. 368.

§ Nothing can more clearly illustrate the difficult attainment of truth and the necessity of caution than this opinion deduced from the counter-statement of the four physicians, Drs. Barker, Stoker, Hagan, and Gamble; and here advanced with so much confidence, as to the inaccuracy of Dr. Mills' cases, in his work on the utility of blood-letting in fever. Our correspondent, at the time he wrote his observations, was not aware that the accuracy of that counter-statement has been at least shaken by the answer of Dr. Mills, the material part of which was reprinted in the last Number of the REPOSITORY, (p. 295.) While the evidence on both sides remains in the present state, we shall refrain from giving any opinion on the subject; resting generally on the reservation with which we fenced our favourable sentiments of Dr. Mills' practice in our review of his volume; "that if his statements be correct, the propriety of his practice must be admitted;" yet we must notice, that remarks published subsequently to Dr. Mills' work, have tended to prove the success of depletion in cases where it was formerly deemed to be injurious.—EDITORS.

discordant opinions which often emanate from the minds of men of undoubted talents, are an irrefragable proof of the difficulty of acquiring certainty and truth in medical inquiries. One physician* has lately affirmed, that all general affections of the system originate in some local disorder, while another † maintains, that local disease seldom occurs, and "but as the consequence of disease in the general habit."

Who shall decide when doctors disagree?—Pope.

But this difference of opinion is not without its use; much good will accrue from it; it invites discussion, spurs the intellectual faculties, and teaches men to think, unfettered by the subtlety of learning and the dogmatism of the schools.

It has been justly remarked by Dr. Currie of Liverpool, that the advancement of knowledge has been retarded in all ages by the promptitude of the human mind to decide with respect to causes. This is lamentably true. Effects are obvious to the senses, causes are frequently involved in impenetrable mystery, and their developement is occasionally impossible. Mankind is always more benefited by attending to the large, open, and perceptible parts of our frame, than by studying too much those finer nerves and vessels, the conformations and uses of which will for ever escape our penetration. It may be safely laid down as an incontrovertible proposition, that inductive reasoning and inferential practice should ever form the basis of all medical researches. He who never reasons but from facts, who takes Nature for his guide, sedulously watches her steps, and always thinks for himself, will gain a much higher reputation and be more extensively useful to humanity, than he possibly can be, who advances theories at variance with observation; envelopes a paucity of ideas in a blaze of unmeaning verbiage, and immolates experience and truth at the shrine of interest and vanity. I have thought it necessary to offer these observations as prefatory to the opinions which I am about to advance regarding the disease which it is the object of this essay to elucidate.

Ulcers of the penis form an interesting subject, whether we consider them with respect to their ambiguity or importance. The nature of the part affected, its liability to ulceration from various causes, and its obnoxiousness to it from illicit intercourse, demonstrably show the practical advantage of the inquiry. Mr. Hunter has said, that the penis is peculiarly disposed to diseases of the ulcerative kind, and that they are not

---

* Clutterbuck on Fever. † Watt on Diabetes, &c.

always to be pronounced syphilitic. It may be asserted, without fear of contradiction, that he who affirms that every ulcer on the genitals is venereal, has more flippancy than judgment, and more confidence than discretion. Judging *a priori*, it does not appear exceedingly difficult to distinguish chancres from common ulcers; as the characteristics of the former are a greater degree of pain, occasional bleeding, an hardened base, an excavated surface, and high or ragged edges; yet local situation, adventitious circumstances, and the probable danger of a mistaken opinion, will frequently induce men to err on what is termed the safest side, and to exhibit mercury where none is requisite. This is a dangerous proceeding, and demands exposure.

Mercury is capable of changing the appearance of an ulcer; and one which would heal in a few days often degenerates under it into an ill-conditioned sore, and especially if escharotics, or the ung. hydrarg. nitrico-oxyd. are applied. Here is an ample source of mischief: that practice which originated in error is perpetuated by mistake; and what the effects are I have no pleasure in conjecturing or describing. In all suspicious or doubtful ulcers, it is wiser far to abstain from administering mercury, and infinitely greater evil is to be dreaded from its precipitate than its protracted administration. Many ulcerations of the penis are perfectly unconnected with the venereal virus; they must have been seen in all ages; and as Mr. Pearson aptly observes, " it will be difficult to assign a satisfactory reason why an immunity from these morbid appearances should have been conferred to those who lived a century or two ago, and be refused to their posterity in the present day*. The labours of Abernethy† have thrown great light on this intricate subject; yet much remains for future inquiries. The imperious necessity of an accurate attention to ulcers of the penis, by which judicious treatment may be adopted, and anxiety, pain, and misery averted, need not be enforced here; and to those who are hasty in their decisions, and employ mercury on all occasions, it may be said, that to convert a mild into a virulent disease, by ignorance or self-sufficiency, and to impair or irreparably injure the constitution by a dangerous, because an unnecessary, medicine, are actions deserving the severest censure, and which nothing can palliate‡.

My principal object in this paper, however, is to call the

---

* See Pearson on the Cure of Lues Venerea.

† See Abernethy's Observations on Pseudo-Syphilis.

‡ Percival's Medical Ethics.

reader's mind to an herpetic affection of the penis, which, though simple in itself, is productive of mischief if misunderstood or improperly managed. I allude to *herpes præputialis*, so designated by Dr. Bateman*, who has given an admirable history of it. It is of common occurrence, recurs repeatedly, and invariably produces ulcers, which an inexperienced or superficial observer might deem chancres. It has fallen to my lot to see *herpes præputialis* frequently, and under circumstances remarkably favourable for correct observation. I shall describe this affection minutely, and shall merely observe, that a strongly marked case is now under my care, where the ulcer is of the size of half a sixpence, and that the gentleman has had eighteen distinct attacks during the last two years and a half, in all of which I was consulted, and carefully watched their commencement, progress, duration, and termination. The patient first experiences a heat and itching in the internal part of the prepuce; this naturally leads him to an examination, and he discovers a red and elevated spot of an orbicular figure, and nearly half an inch in diameter. In a few hours it is covered with several small vesicles, and from these there is a watery exudation. The vesicles ulcerate on the second or third day, and generally, but not universally, become confluent†. In some instances, the part on which the red spot appears is greatly tumefied, and here the ulceration will be more extensive and of longer continuance. The size of the spot regulates the number of vesicles; a large one will display five, a small one three. On the fourth day the ulcer is definite, the red spot and tumefaction have disappeared, and nothing is visible but a superficial sore, with a whitish surface, which discharges a fluid more resembling mucus than pus. After the fourth or fifth day the ulcer does not increase, and its healing depends upon its extent. When small, I have known it heal in four days; much oftener it occupies ten, eleven, or twelve, and I have known it to be three, and six weeks; but in these instances mercury had been employed. In the ulcerative stage there is no pain; once healed, it remains so; and no mark is afterwards discoverable.

The disease in question, though annoying in the first stage and unpleasant in the second, is simple, of no consequence whatever; and, like some other species of herpes, nature will alone effect a cure. Daily ablutions, and the application of cerat. calamin. upon lint, comprehend every curative remedy. Mercury is hurtful, lotions injurious, medicine unnecessary. Dr.

---

* Bateman on Cutaneous Diseases, Second Edition.

† See Bateman on this circumstance.

Bateman, who has pleased me greatly by what he has written on an affection which had long been familiar to me before he published his book, prefers dry lint; but with me, this has not succeeded.

Herpes præputialis is liable to recur in the same individual every six, eight, or ten weeks, and I have known two separate attacks occur in one week. I have already adverted to a gentleman who has suffered eighteen in two years and a half, and during that period, he has never enjoyed an interval of three months: yet antecedently he was a total stranger to the disease. It is desirable to ascertain what the causes are which dispose men to *herpes præputialis:* whether the single or the married are most obnoxious to it; those who lead a life of comparative celibacy, or those who indulge in sexual commerce. I have been induced to think deeply on this subject, and am of opinion it chiefly originates in the former, and commonly appears in those who are moderately chaste, and in whom there is an aridity of the prepuce, and a defective or morbid state of its secretion. If this opinion be founded on truth, it is fortunate for society. Unenviable indeed would that man be, and agonizing his situation, who, married to a much-loved object, was frequently assailed by this affection, which, while it lasted, might engender suspicions in her mind injurious to conscious innocence, and destructive of connubial happiness.

I shall conclude by remarking, that in the ulcerative stage only is danger to he apprehended from an incorrect judgment. A man who has had a cyprian goddess in his arms, observes an ulcer on his penis, suspects its origin to be venereal, and applies to a practitioner, who, if unacquainted with its true nature, may inconsiderately treat it as a chancre. The consequences are easily predicted; the ulcer will enlarge and assume a different aspect, all traces of the original disease will be lost, mystery will be added to mistake, sufferings arise from ignorance; mercury will be imprudently persisted in, and if a cure be obtained it will be fortuitous.

Sunderland, August 28th, 1814.

*** Of the discovery and subsequent history of *herpes præputialis*, as it has been, perhaps, incorrectly denominated by Dr. Bateman, we can give our respectable correspondent information, which does not hitherto seem to have fallen in his way. This disease was first described in the Medical and Physical Journal for June 1810, (vide REPOSITORY, page 206), where a full history of its appearance and progress was given, with a plate descriptive of its stages. Subsequent to that period it has been thrice noticed by Dr. Bateman, viz

in the Edinburgh Medical and Surgical Journal, in Rees's Cyclopædia, and in the Synopsis of Cutaneous Diseases. Some remarks made by Dr. Bateman in the Edinburgh Journal, drew from the discoverer of this complaint a further illustration, which enabled the Doctor to correct his former detail, into what he has since printed in the Synopsis. If our correspondent will take the trouble to compare the original document in the Medical and Physical Journal, Vol. xxii. No. 136, for June 1810, page 441, and some remarks in the same Journal, Vol. xxvi. page 495, with what has been written by others, he will readily appreciate the right of discovery.—Editors.

III.

A Case of Diseased Liver, terminating fatally; with some general Observations on Hepatic Affections. By W. Newnham, Surgeon-Apothecary, Farnham, Surrey.

Miss H. W——, aged twenty-two years, the subject of the following case, became indisposed very early in the spring of 1813. At this time her principal complaint, and indeed the only one she would acknowledge, was a slight irritating cough, which she referred entirely to the throat; and for the relief of which an anodyne emulsion, with an astringent gargle, were prescribed.

In the beginning of April she complained of some soreness and a sensation of stricture of the præcordia. As the bowels were at the same time in a constipated state, I directed her to take some aperient medicine; and a Burgundy pitch plaister to be applied over the epigastric region. Still I had no adequate idea of the formidable nature of the disease under which my patient was labouring; and, unfortunately, she contributed to deceive me still further, by the carelessness she evinced with regard to its removal.

It was not till the 11th of May that, perceiving that the illness of Miss W. still remained, and conceiving that there must be some secret cause of the protracted *symptoms*, which, though *apparently trifling*, now began to influence the vigor of the system, I was induced to take a more serious view of her complaints.

Upon minute inquiry, I now found that the slight cough, of which she complained, was accompanied with a permanent sense of soreness in the epigastric region, that her appetite was impaired, and after taking food she suffered considerable uneasiness in the stomach. Her bowels were almost always in a constipated state, although this condition alternated occa-

sionally with diarrhœa. Her nights were much disturbed by dreams, and a variety of *nervous feelings*. She suffered considerably from palpitation of the heart, and slightly from pain in the right shoulder; and her pulse was quicker than in a natural state.

Judging from these symptoms, I was induced to consider all her sufferings dependent upon some derangement of the chylopoetic viscera; and accordingly I directed for her the following bolus, to be taken at bed-time:

℞ Hydrargyri Submuriatis gr. ij.
Extracti Hyosciami gr. iv. ft. bolus.

May 13th. — The bolus has produced the desired effect upon the bowels, and removed a quantity of indurated, fœculent, scybalous matter; and my patient feels better. She was now ordered to take some light tonic medicines, with small doses of rhubarb, to keep up a gentle stimulus upon the intestinal canal; and the following pills:

℞ Pil. Hydrargyri gr. ix.
Ext. Hyosciami gr. xij. misce ft. massa in pil. vj. dividenda; quarum ij. hora somni omne nocte sumantur.

This plan was persisted in for a fortnight, with evident benefit: the appetite of the patient improved; the cough almost ceased; and her sleep became natural and undisturbed. During the last fortnight she took moderate exercise; and strict attention to this circumstance, together with an absolute freedom from her customary sedentary pursuits, were rigidly enforced. As she was disinclined to take medicines any longer, I directed her to live upon a light nutritive diet—to be particularly careful that the bowels were regularly evacuated every day—and to take three grains of the mercurial pill *alternis noctibus*.

The above plan was pursued until she left the neighbourhood, early in June, on a visit to a friend at some distance; where, as I am informed, she was attacked by violent diarrhœa, which greatly reduced her strength, and was with difficulty checked. Of the treatment then adopted by her medical attendant I am quite ignorant: I believe it to have been confined to palliating the extreme irritability of the intestinal canal.

At the expiration of six weeks Miss W. returned to Farnham. I was sorry to see her in an emaciated state, complaining of pain in the side, which occasionally continued for a few hours; her cough more troublesome; the pulse quicker, rarely under 100; and the bowels in a very irritable and frequently disordered state. As she was now to remain under my care but for a few days, I merely directed her to take the following pill every night at bed-time:

℞ Pil. Hydrargyri
— Sap. cum Opio, ā ā ʒss, contunde simul et divide in Pil. xij. una pro dosin.

After a few days she removed to her native place, where her complaint was regarded as phthisis pulmonalis, and treated accordingly. But the irritability of the bowels having greatly increased, and the patient's strength very much declined, she became dissatisfied with the treatment adopted, (more particularly as she knew it to be contrary to the view I had taken of her complaints,) and expressed her desire to take the opinion of some physician in the metropolis. This was gladly acceded to: I saw her for a few days on her journey to London; and from the progress of the symptoms, I now became more fully confirmed in my previous opinion, as to the nature of her disease.

On the 3rd of November she removed to London, where she consulted a physician of eminence, by whom she was attended regularly for more than five weeks, and who considered her disease to be tabes mesenterica, without any *present* affection of the lungs. He prescribed for her small doses of rhubarb, to be taken every second morning—a draught of decoction of cascarilla to be taken twice a day, and some of the extract of conium and of white poppy at bed-time. She appeared to amend for a short time; but soon relapsed, and finally returned into the country on the 16th of December, very much worse. She had now a regular hectic fever, with evening exacerbations; her pulse in the morning was 120, and in the evening 160; her appetite wretched; her cough worse, with considerable mucaginous expectoration; and her debility was so great as to incapacitate her for sitting up more than three or four hours during the day; while the constantly relaxed state of the bowels contributed more and more to augment her debility.

I attempted, even in this reduced state of her strength, once or twice to give her very minute doses of pilula hydrargyri; but she could not now bear the smallest dose of this medicine; and as the disease appeared to be fast approaching to a fatal termination, my treatment was confined to palliating the most distressing symptoms, and rendering the last days of her life as comfortable as circumstances would allow. She now gradually sunk. A few days before her death, which occurred on the 1st of February 1814, her expectoration became purulent; and she died worn out by constant irritation.

DISSECTION.

On laying aside the integuments of the abdomen, the first object which presented itself was the *liver*, enormously enlarged. Its right lobe was extended over the epigastric, very far into the left hypochondriac region, while its inferior edge

reached down to a considerable distance below the umbilicus, so as very greatly to obscure from my view the other abdominal viscera. The left lobe occupied the whole of the left hypochondriac region; and so great was the enlargement of this viscus, that it had displaced in a great degree the stomach, which was consequently situated much lower than usual. The liver adhered firmly by a large portion of its convex surface to the diaphragm; its edges were indurated, and on its surface, and throughout its whole substance it was every where studded with innumerable little tubercles, which had completely obliterated every vestige of healthy liver. The gall bladder contained a small quantity of bile of a morbid quality. The coats of the intestines were generally thickened, but presented no other diseased appearances. A very few of the mesenteric glands were in an incipient state of enlargement; but the disease in them was evidently of recent origin, and referrible, as well as the thickening of the coats of the bowels, to the primary affection of the liver, and the long-continued diarrhœa, which was its consequence. The other viscera of the abdomen were perfectly healthy.

On inspecting the thorax, some adhesions were discovered of the pleura pulmonalis to the pleura costalis; and in the substance of the lungs were a few minute tubercles in an incipient stage; *one only* of which, however, had attained the suppurative process, and which contained nearly half an ounce of pus. This too, it is evident, was not the original disease, but of comparatively recent formation.

OBSERVATIONS.

On reviewing this unfortunate case, the first observation which strikes, is the insidious nature of the disease, and its having been consequently allowed to gain such a footing in the system, that it could not readily be dislodged. It happens not unfrequently, that medical men are consulted by a certain order of whimsical patients, whose narrations are rendered ridiculous by the imaginary ills which they detail. Here often medical men are under the necessity of directing something as a placebo; but such patients should not be identified (as is too frequently the case) with those whose valetudinarian systems assure them they are not in health, although they have no *great* ailments to describe. Under such circumstances we are all liable to err; and it becomes us most carefully to discriminate between the *mental hypochondriac*, and the slight expression of a formidable disease, which has not yet openly shewn its malignant tendency.

But this case also illustrates how far the minds of practitioners may be led astray from the principal seat of disease, by an attention to some *one prominent*, and too frequently *delusive*

symptom. The unseen influence of prejudice is far greater than we are willing to acknowledge; or, perhaps, are ourselves aware of; and if we have a favourite theory to support, or a favourite mode of treatment of some particular disease, then it is that we are secretly biassed in the consideration of the disease under our immediate attention, and are induced to imagine we see present those symptoms which we think ought to be present, and lead us to our favourite conclusions.

The contrariety of the opinions of the medical attendants of this patient, shews clearly the want of an accurate diagnosis of diseases of the liver. There can be no doubt that the disease of the liver was the primary source of every complaint in the present instance; and yet that disease was overlooked; not indeed from carelessness, not from ignorance, but entirely from a mistaken diagnosis. Dissection has frequently shewn extensive disease of the liver, where its existence was not even suspected before the death of the patient; and although there can be no doubt that there are many symptoms originating either immediately, or by sympathy, from diseased actions going on in the hepatic system which are now generally referred to the liver, instead of other organs as was the case a few years ago; yet very much remains to be accurately determined concerning the diseases of this important viscus. Hence the necessity of authentic records of cases terminating unfavourably, as well as favourably, and the dissections of such as prove fatal, in order that by degrees, our errors being perceived, and our success made public, we may arrive at a more correct diagnosis, and a more successful method of treatment.

August 20th, 1814.

IV.

An Account of a Tumor of the Wrist: and a Case of Chylous Dropsy. By F. W. WEAVER, Surgeon-Apothecary, Walsall.

THE invitation held out by the Editors of the REPOSITORY to the younger members of the Profession, to communicate their observations, has induced me to draw up an account of the two following cases, which, although they may not possess much novelty, yet appear to me to be not altogether devoid of interest.

The first case will, no doubt, be considered either as a species of ganglion, or a swelling of one of the bursæ mucosæ *(Saculi Mucosi)*, though not exactly characteristic according to the synoptical definition of nosologists. The contents of a ganglion generally consists of a gelatinous substance, in appearance resembling albumen ovi; on the contrary, swellings of the bur-

sæ mucosæ are generally filled with a fluid, unless they arise from a sprain, or some other violent cause; in which cases concretions are found mixed with, or suspended in, the secreted fluid.

Case I.

Mr. B——, of this town, made application to me relative to a tumor which occupied the wrist and part of the hand, and seemed to have a free communication from the one to the other. By compressing the carpus the hand became distended, and by applying pressure over the hand the tumor moved to the wrist. It had been many months in forming, and a variety of means had been previously, but ineffectually, used, for the purpose of promoting the absorption of a supposed fluid. Upon minute examination there was no evident fluctuation indicative of pus, or any other kind of fluid; no particular inflammation was perceptible, nor was the tumor attended with any pain. Considering therefore that it might have originated from a morbid secretion of lymph, within the sheaths of the tendons, constituting (what I suppose it to be) a ganglion; I made an incision through the whole length of the tumor, (having previously compressed the carpus with a bandage,) and evacuated most of the contents of the sac: but instead of finding a gelatinous matter, characteristic of ganglion, the contents resembled more the appearance of cucumber seeds, of a cartilaginous nature, firm and hard in their texture, and perfectly incompressible, without the admixture of any kind of fluid*. The result of this case is not likely to be productive of much advantage to my patient, (as he is, I am apprehensive, of a scrophulous habit,) many sinuous ulcers having formed in the hand, which eventually may be productive of much mischief. Should a similar case come again under my observation, I would not open the sac†.

Case II.—Chylous Dropsy.

Mr. M.——, of this town, had been indisposed for a consi-

---

* Although we do not wish to doubt the accuracy of our young correspondent, yet we are inclined to think that a certain portion of fluid must have been present to lubricate the concretions and render them moveable on each other; for in swellings of bursæ mucosæ, of which this is evidently a case, there is always a certain degree of fluctuation perceptible, even when the concretions are very firm.—Editors.

† The unpleasant consequences of opening the sac, depend, in our opinion, more on the very tendinous structure of the joint on which the tumour was formed, than, perhaps, on any scrophulous taint of the constitution of the patient. Unless ganglions, or swellings of bursæ, situated on the wrist, become very troublesome from their size, it is always more advisable not to open them.—Editors.

derable length of time: his disease was supposed to be connected with some morbid affection of the liver, and treated accordingly with mercurials and other remedies; but, nevertheless, at length ascites became manifest, as the unwelcome harbinger of death, which soon relieved him from the tortures of disease. A few hours after his death, I was sent for, (in consequence of an uncommon distention of the abdomen,) to evacuate the hydropic effusion, previously to the body being placed in the coffin. I drew off about sixteen quarts of fluid, resembling milk, perfectly inodorous and insipid, and some of which I kept for many weeks, without any appearance of decomposition. This being the only instance of chylous dropsy I ever met with, it was a novelty to me, and at the time excited some surprise, not being then able to form any rational or satisfactory opinion as to the cause of such an unusual appearance, and not supposing that the phœnomenon originated from the rupture of an absorbent vessel in the body. Had I been acquainted with the opinions of Cruickshanks and Baillie, or with the case related by M. Poncy, jun. in Saviard's Surgery, my surprise would not have been excited, nor my imagination racked in forming conjectures as to its causes.

August 10th, 1814.

V.

A remarkable Case of Obesity without any external Appearance of Corpulency, accompanied with Hydrocephalus. By Richard Chapman, Member of the Royal College of Surgeons, London, Hammersmith.

E. L—, Esq. was for some years troubled with bilious vomitings and purgings, which disappeared after an evacuation of blood, in considerable quantity, by stool. These attacks were repeated about once in five or six weeks, but confined him only a few days. He was about 49 years of age, middle sized, muscular, not very short necked, and had a well formed chest, with rather broad shoulders, but without any appearance of corpulency. His complexion was rather pallid, although he was of a gay and active turn until a few years before his death. When a youth, Mr. L.'s appetite was always bad. He had a great dislike to animal food, and lived chiefly upon fish and small birds. He was very assiduous in business, until the last three years of his life, when the vomiting and purging returning very frequently, produced so much debility, as to render him incapable of taking as much exercise as he had formerly used.

It was in the month of January 1813, when I first visited him; from which period I will state the symptoms of his disease as they occurred. He complained of giddiness in the head, dimness of sight, particularly towards the close of his life; fulness in the head, noise in the ears, excessive debility, and at one time he was exceedingly deaf, but this symptom did not continue above a fortnight; his pulse was weak, very quick, and varying during the day; being in the morning about 100, and encreasing towards the evening to 120, sometimes 125. There was occasionally great heat in the skin, but the fever was very irregular. The tongue was very brown, the teeth covered with black sordes, and he had no appetite. He was at times attacked with furious delirium, which came on chiefly in the evening, and subsided before morning. He scarcely ever slept during the night, but would sleep very soundly in the morning for several hours. There were excessive vomitings of green bile, followed by dark-coloured, bilious, even black, loose stools. These symptoms formerly disappeared when copious evacuations of blood by stool supervened; but there had not been any blood evacuated for about three weeks before his death. He complained of great difficulty of swallowing, and when any liquid was taken into his mouth, was obliged to hold it there for some time before he could swallow it. During the last week he lived, he was troubled with a dry cough and shortness of breath, particularly during sleep; his respiration was quick and laborious, and he awoke as if in a state of suffocation.

When asked where he felt pain, Mr. L. always put his hand upon the epigastric region, and complained of great fulness and tightness, extending to the right hypochondrium. Sometimes he complained of great heat in his bowels, but soon afterwards would say they had lost their heat, and were very cold. When he was raised in bed, or lifted out of it, syncope and palpitation of the heart came on; and the countenance became pallid. These symptoms increased very much for the last three days, and he appeared to die as if suffocated.

For more than three years Mr. L. had complained of faintness, and had had recourse to wine, brandy and water, or geneva and water; and of these he drank very frequently. Soon after eating, his food passed off by stool; and I learnt that he generally had from ten to twelve stools, sometimes more, in twenty-four hours. He died on the 9th of February 1814.

DISSECTION.

Two days after death I opened the body, in the presence of Mr. Grice, a neighbouring practitioner, and another medical gentleman. The head was first examined; and upon

removing the integuments of the cranium a considerable quantity of fat was found loading the adipose cells. Upon removing the calvarium and dura mater, water appeared between the arachnoid membrane and pia mater; constituting hydrocephalus membranarum. The blood-vessels of the head were extremely turgid, but no extravasation of blood appeared, nor was there any disease of the substance of the brain. There were four ounces of water in the right lateral ventricle of the brain, but no water was found in the other ventricles, nor any other diseased appearance in the head.

On examining the chest and abdomen, the adipose membrane was considerably thickened, in the latter above two inches. The muscles of the chest were strong, but very pale; those of the abdomen very small and also pale. Upon raising the sternum, the space between the lamina of the mediastinum was loaded with a considerable quantity of fat; there was a prodigious mass of fat at the superior part of the sternum, where the thymus gland is situated in children; and the bronchial glands were also surrounded with large quantities of fat. The lungs were sound; but there was an adhesion of the right lobe to the pleura costalis. Upon opening the pericardium, a very large quantity of fat surrounded the heart; the greatest quantity was upon the muscle covering the right ventricle. The heart, independent of the fat, was very small; the muscles pale and very flaccid: there was scarcely any blood in the auricles and ventricles; nor more than an ounce in the whole of the cavities. In the abdomen the quantity of fat was immense; the omentum appearing to be one thick mass of it; and, attached to the large intestines, were pieces of fat of the size of a hen's egg: they were at the distance of two inches asunder, and very numerous. The mesentery was so fat that scarcely any glands or blood vessels were perceptible. The stomach and intestines were very sound—no disease whatever appearing in them. The liver was no way morbidly affected, neither increased in size, nor firmer than natural, nor diseased in the pori biliarii; but it was rather paler in colour than is usual.

August 1814.

VI.

Two Cases of Mortification which terminated favourably.

By Reginald Williams, Surgeon-Apothecary.

Although since the period when the celebrated Pott published his mode of treating mortification in the extremities

of aged people, by opium, &c. experience has fully established its efficacy, yet the following two cases may not be devoid of interest or use. The latter in particular shews the power of opium, almost unaided, in arresting the progress of sphacelus in these cases, and under the most unpropitious circumstances:

CASE I.

D. D. an exciseman, between sixty and seventy years of age, and of intemperate habits, received about four years ago a severe blow on the knee, to which no attention was paid for three weeks after the accident. When it was first examined, a mortification had taken place to a considerable extent, surrounding the knee-joint, with so much destruction of the soft parts, that the greater portion of the patella was bare.

The patient's health was greatly impaired, with such a loss of appetite and strength as afforded little prospect of his long surviving the consequence of his own neglect.

Bark, wine, and opium were administered; fomentations and soothing poultices applied to the joint, and a generous diet was enjoined. In a short time the man's general health improved; the part affected assumed a more promising appearance; and after some weeks, about two-thirds of the lower portion of the patella came away, and from time to time parts of the tendon and ligaments connecting it with the tibia; the wound gradually contracted, and put on a healthy aspect; and ultimately the patient recovered, and is now perfectly well. Notwithstanding the extensive injury sustained, the joint is not quite anchylosed, and he walks with the assistance of a stick without betraying much lameness.

CASE II.

Four of the toes of the foot of a woman near eighty years of age, whose general health had been indifferent for many years, became in a state of mortification. This woman's aversion from medicine and her obstinacy were so great, that it was with the utmost difficulty she could be prevailed on to comply with any directions; but at length, partly by persuasion and partly by stratagem, she took from twenty to forty drops of laudanum three or four times a day, in wine or wine and water. Under this treatment, with soothing and gently stimulating applications to the toes, she slowly recovered and is now living.

Plympton, Devon, 1814.

VII.

An Instance of Rubeola occurring twice. By W. B. NEWMAN, Surgeon-Apothecary, Corsham, Wilts.

THE 20th of May 1813, I was sent for to a boarding-school, to see Master W. S—, a boy, about seven years

and a half old, and of a delicate constitution. He complained of cough, with difficulty of breathing, drowsiness, sneezing, weakness of the eyes, and repugnance to the light, with the other symptoms preceding measles: and the usual eruption soon after appeared.

I immediately pronounced it a case of measles, and treated it accordingly. After his recovery, the cough which usually attends the disease, continued for a short time. He had, after the appearance of the eruption, been removed to a room by himself.

The beginning of October this disease made its re-appearance in the school. On the 9th I was desired to see the above patient again, who complained of great lassitude, and had other symptoms very much resembling measles. But having had the disease so recently, I considered his present complaints to proceed from a cold only. His bowels being in a constipated state, I ordered him some aperient medicine, and to take in the evening a diaphoretic draught. The following morning I was very much surprised to see an eruption, which appeared to me to resemble the measles. Having heard of but very few instances of this disorder occurring a second time, I examined the patient very closely, and was then fully satisfied of its being measles, and by pursuing the usual plan of treatment he got well.

Every circumstance induces me firmly to believe, that measles actually occurred twice in this young gentleman; and I feel more confident in my opinion, from the perusal of the valuable cases published by Dr. Baillie in the third volume of the Medical and Chirurgical Transactions.

July 26th, 1814.

VIII.

Case of Nodes, successfully treated by the external Application of Nitric Acid. By P. S. Knight, Member of the Royal College of Surgeons, London. (*Communicated by* Prof. Carlisle.)

A gentleman, aged about thirty-five years, was attended by a physician and surgeon from the autumn of 1813 to January last; during which, he had gradually sunk, and his medical attendants intimated that his life was in danger. I was requested to visit him, at a distance of one hundered and thirty miles. I found him much reduced, and labouring under several complaints, all of which I considered as subordinate; and depending upon the one which I shall proceed to relate.

He had been attacked with acute pain in the back part of the head, temples, and over the eyes, which had continued with various remissions and accessions, always worse about six

o'clock in the evening, and which often kept him awake the whole night. After a few days, a swelling made its appearance at the back part of the head, near the seat of the severe pain, and which proved to be an abscess; it had been opened, and I found a small orifice, having thick edges curled inwards, discharging much mucus, mixed with a little pus. The probe passed about half an inch under the scalp on each side, and where the pain was most poignant, there was a small rough projection, which felt as if the pericranium had ulcerated and exposed the cranium.

This had the appearance of a venereal node, and I was disposed to believe it was such; because five years before, he had what were considered chancres, and a bubo under his arm; for the cure of which he underwent a slight salivation, and they healed. But, both previously and subsequently to this attack, his health had been disordered; and at this period his appetite was weak and depraved: he preferred ham, bacon, dried herrings, &c. to fresh meats; the secretion of bile was irregular, and the chylopoetic system altogether very much deranged.

I directed my attention to the first passages and to the pain; dressing the abscess with digestives. I had soon the pleasure of seeing his health improve. I then prevailed on him to let me open the abscess, &c. to its most depending extent, which was a little above the upper part of the attachment of the rectus-capitis-posticus; a healthier discharge was soon procured; but in a few days he complained of a throbbing acute pain near to the old spot; and shortly after a hard tumour, feeling exactly like a venereal node on the cranium, made its appearance. Having got his bowels into a soluble state, I gave the infusum gentianæ with the tinct. valer. vol., and tinct. lavend. co. to counteract an excessive depression of spirits; and kept his bowels regular with the pil. ex. aloe cum myrr. and pil. hydrarg. partes equales—being desirous that the nodes should not be checked by the specific, if they were venereal, though I do not pretend to know when mercury *begins* to exert its specific powers.

As the discharge, about ten days or a fortnight after I first saw him, did not look so healthy as it had done, and seemed to be relapsing into its former state, I applied to the scalp and round the abscess a strong solution of nitric acid. In three days the second node had nearly disappeared, and a healthy pus was discharged from the abscess. From this time it began to heal, and was well in three weeks; but in the interim, two fresh nodes made their appearance on the right side of the forehead near the margin of the hair. A few applications of the nitric acid solution, strong enough to blister, caused these nodes to disappear; but the space between them (about half

an inch) felt as if filled up by thickened pericranium, and there remained an enlargement of that side of the forehead for some weeks; during which time the nitric acid solution was used two or three times in a week, besides the tonic mixture regularly, and the pills occasionally. In about six weeks he was restored to better health than he had possessed for some time before, and continues still in the same improved condition.

Whether these appearances were the effects of virus from an impure connection, or of a deranged constitution, this case does not, I apprehend, afford any satisfactory illustration.

I am not aware that the nitric acid has been used as an *external* application, either to real venereal nodes, or pseudo-syphilitic nodes. I attribute the speedy success of the treatment to the use of the nitric acid; for it exerted a powerful influence over the nodes, whilst the constitution was in great disorder; and indeed its power is obvious from its repelling four nodes in succession.

I have stated these facts, in the hope that some of the numerous and ingenious readers of the MEDICAL REPOSITORY will prosecute the use of the nitric acid as an external application; and ascertain more fully its merits in discussing swellings of the periosteum and enlargements of the bones.

Kennington Lane, September 1814.

PART II.

ANALYTICAL REVIEW.

I.

Hints on Hydrophobia. By HENRY EDMONDSTON, A.M. Surgeon. 8vo. pp. 44—xxii. Newcastle, 1814.

THESE Hints are recommended to the Profession, and to the Public, by the motives which actuated their author, and by the perspicuity and force with which they are written. Mr. Edmondston does not profess to have any novelty of treatment to propose; but he strenuously persuades to the employment of the only prophylactic which he conceives can be serviceable, and which all men who understand the subject approve. Hitherto no mode of treating *Rabies* has been successful; but all cases of that disease, when hydrophobia has appeared, have terminated fatally. The only chance for saving the patient, is

a complete extirpation of the bitten part, by an extremely careful excision of every portion of skin, muscular fibre, cellular substance, &c. that the poison has touched. This is the position of Mr. Edmondston. It being an almost universally received opinion that rabies is, "in every instance, produced in one animal by the direct application of a portion of poisonous matter generated in the body of another labouring at the time under the disease;" and, this direct application being, for the most part, made by means of a bite, Mr. Edmondston has no scruple in declaring his entire conviction, that, in the generality of cases, no safety, no security against its accession can be expected, or even hoped for, with any degree of confidence, unless the bitten part be cut out.

"This appears to me," he says, "to be the only sure preservative, the only certain means (if such expressions be at all admissible on such a subject) of guarding the constitution; therefore, until this be accomplished, nothing can be said to have been done."

As we perfectly agree with the author, both in the principle and the practice, and as in this we suppose ourselves to be in concurrence with the most judicious of the faculty, there remains but little more in this part of the Hints than to present to our readers the method proposed by Mr. Edmondston for the performance of the excision; and this we think it the more proper to do, because there is in his directions a carefulness and precision which go far toward ensuring a successful issue.

"The wound being inflicted in a part admitting of excision, the operator must first proceed to examine carefully and accurately the direction, depth, and extent of the bite, so as to ascertain precisely how much of the external skin he is to include in his first incision. This is a point of great importance, not only as it saves the patient from any unnecessary cutting, but frees the operator from embarrassment, and enables him to go steadily through the operation. If this be not attended to, he will have to repeat the incision, with all the additional uncertainty which that repetition will occasion in his movements.

"Having formed a correct judgment with regard to this material point, he is to provide himself with several cloths, and vessels of water, and several compresses of lint or linen to serve the purpose of sponges, so that the wound, or the neighbourhood of it, may not be touched with the same piece more than once. The reason of this is, that if the same piece were to be used a second time to clean the wound of blood, a portion of poisonous matter that may have been removed by it, would have a chance of being re-applied.

"The wound, and all the surrounding parts, having been previously washed in the most careful manner, (lest, in making the incisions, the sound parts, through which they are made, may be inoculated with the virus,) two incisions or cuts are to be made, one on each side of the wound, forming an ellipsis or oval, in such parts

as will admit of it, which should be carried to such depth as completely to remove the part. It must be sufficiently evident, that in order to do this, it will be necessary to cut deeper than the bite has penetrated, otherwise the patient is exposed to a painful operation without deriving the smallest benefit from it.

"It is not requisite to go much deeper; but the incision must be carried down beyond the part to which the tooth of the dog has pierced; and in judging of this, it is safer to exceed a little in depth, than, from any false notions of tenderness to the person, to half perform the operation, and leave him to the chance of dying afterwards of Hydrophobia.

"It should then be narrowly examined, if there is any part, in the piece excised, through which the dog's tooth appears to have passed; and in case there is, the excision should be carried deeper. In making the incision, great attention should be paid to the direction of the tooth, and if the knife should enter the wound made by the dog's tooth, it will be necessary to re-commence the operation with a clean instrument; and this as often as the occurrence should take place. For if we continue to use the knife, which is likely to be contaminated in consequence of its entering the wounded parts, the operation may be rendered useless by the sound parts becoming inoculated with the canine virus."

We recognize in this the judicious remarks of Mr. Gillman; and Mr Edmondston very liberally acknowledges his obligations to that writer's ingenious Dissertation on the Bite of a Rabid Animal.

On the method of treating the wound after excision of the bitten part, there still exists some diversity of opinion. Mr. Edmondston believes it should be treated like a common wound, and healed, if possible, by the first intention.

"It has been the general practice to apply to the wound, after the excision, strongly stimulating, or as they are termed, escharotic substances, with the view either of destroying any remaining portion of the virus, or of producing great suppuration, and by that means enabling the parts to throw off any offending matter that may be retained. But this, I apprehend, is, to say the best of it, but a doubtful practice. For, where much inflammation and suppuration are present, there must be great ulceration; and where there is great ulceration, there must be a corresponding absorption. So that, if any of the poison be left in the wound, there remains the same chance of ultimate contamination from the subsequent ulceration, as if no excision had taken place. It is not improbable too, that inflammation tends to favour that process, whatever it be, by which the virus is taken up into, or acts upon, the system. In short, we must trust to the excision, and to it alone. If it has been complete, and every particle of the poison taken away, there can be no necessity for any succeeding inflammation and suppuration. If it has been incomplete, it is to be feared that these processes will prove ineffectual. This conjecture receives some confirmation from the result of numerous cases of excision, where cauteries, escharotics, and di-

gestives have been resorted to, but where the original poison of the bite had not been wholly removed by the knife."

This is a point of importance not easily decided upon; but yet demanding decision. If the application of stimulants to the wound, by exciting a secreting surface, promotes absorption, as the author asserts, then can there be no question about the impropriety of their application. But if on the contrary, as we are disposed to believe, they retard that process, and encrease the action of the exhalent termination of arteries, inducing a considerable discharge of fluid from the wound, serous first and purulent subsequently, they give the additional chance of dislodging any remaining portion of virus. If no portion of virus remains, the keeping the wound open, or closing it, is of no importance; but if a portion of virus remains, surely it has a greater chance of being discharged if the wound is kept in a suppurating state, than if it is enclosed within a wound healed by the first intention. In inoculation for the small pox, for vaccina, and in this particular instance of rabies, the less the local inflammation, the more certain is the subsequent accession of disease. For these reasons we are disposed ourselves, and venture to recommend to our readers, the practice of keeping the wound suppurating for some time after the excision; or, in other words, not suffering it to heal by the first intention.

If the bite is inflicted on a part of the body where excision would be of extreme danger, or is under circumstances that will render the complete extirpation of the poisoned part a matter of very doubtful accomplishment, assiduous ablution, with water four parts and one of volatile alkali, is adopted from Mr. Gillman. As a practicable means, there can be no question about the propriety of this; and there are some instances of its apparent usefulness. In the Journal de Médicine for November 1813, Dr. Meglin, of Colmar, relates a case in which the wounds were inflicted on the face. They were first burned with a hot iron; then repeatedly for many days washed with a solution of one grain of caustic potass in a pint of water: the patient was also salivated; and after three months he had not taken the disease. Many instances of the apparent advantages of ablution with water only, or with various substances dissolved in it, and from the application of the actual and potential cautery, &c. are recorded; but these means are to be considered as auxiliary to excision, or to be employed where the bitten part is so circumstanced as not to admit of being removed by the knife.

Mr. Edmondston urges, and very properly, the necessity of removing the bitten part as soon as possible after the infliction of the wound. And this he esteems to be the only possible

security. Though we admit most fully the advantages gained by the *immediate* removal of *the whole* of the wounded part, we believe from facts that have fallen under our own immediate cognizance, from the relations of others, from forcible analogies, and from the laws of the animal œconomy, that at any period subsequent to the bite, excision may be employed with reasonable prospect of advantage; and that even after the accession of hydrophobia it should not be neglected. Writers who have closely observed the progress of this disease assert, that some irritation in the wounded part always, or generally, precedes the accession of hydrophobic symptoms. That this is the point of time when the virus is beginning to act, there seems little doubt; and if the part be then completely extirpated, the probability is, that the patient will be saved. Six years ago we had occasion to extirpate the bite of a dog believed to be rabid, from the fleshy part of a man's thumb. The wound was soon well, as it healed by the first intention. It remained perfectly easy for five weeks, and then the cicatrice changed to purplish blue, and a tingling sensation was felt where the wound had been. At this moment, the part in which this sensation was felt, was largely cut out; it continued in the state of an open sore for some weeks, and the man yet remains well. Several individuals of a family were bitten some months since by a favourite dog. About six weeks after the accident, one of the individuals, an elderly lady, died rabid. The bitten parts in the other individuals were then, (that is, six or seven weeks after the bites were received,) cut out, and they all of them yet remain well. These we believe were under the direction of Mr. Saumarez, who may be induced, should these remarks meet his eye, to give the facts to the public. As corroborative of the beneficial effects of cutting out the bitten part, at any time after the infliction of the bite, they are valuable.

If the hydrophobic symptoms of rabies are always, or commonly preceded by a morbid action in the part bitten, there are few who will not believe that the rabid poison is then and there becoming active; that it is there assimilating the fluids of the part; and that it is from thence the morbid material is distributed into the frame. This view of circumstances will always induce us to urge the extirpation of the bitten part immediately on the bite being inflicted certainly; but, if this is neglected, at any subsequent period, and *especially without delay*, when the poison is evidently becoming active in the part where it was inserted.

In the second part of this well-written pamphlet there are what the author calls "miscellaneous observations" on the state of the mind in hydrophobia—on the analogy of the disease to tetanus—and on the remedies employed hitherto, un-

successfully, for its cure. Of these we have only room to notice that which relates to the failure of every means yet devised for its cure. We hope with Mr. Edmondston, "that there does exist in nature a remedy for hydrophobia," or rather for *rabies**, of which hydrophobia is only a symptom. From the latest discovered, as has been erroneously supposed, of these means, *blood-letting*, we were, by accounts transmitted from India, led to expect a cure of this frightful malady. The results of the practice, however, in this country, do not support that expectation. We have much reason to fear, that this, like every other means yet employed, will be found ineffectual in specific hydrophobia.

In the case related by Dr. Satterly, (*Medical Trans. vol. iv.*) a fact, however, appeared, which holds out a ray of hope in the treatment of this yet irremediable malady. The curative effect of full and severe vomiting in a disease of extreme violence and of extraordinary rapidity in its progress, and in which, a priori, it would have been imagined to prove highly injurious, shews, that this reversed action of the stomach may be so managed, as to stop the progress of inflammatory action of the most severe kind. In several papers published in periodical works, Sir William Adams has proved by authentic documents, that the Egyptian ophthalmia has been suddenly arrested in its course by this process. And we have reason to believe from the facts produced by him, and from various other instances, that severe vomiting, when kept up for several hours, has great power over the inflammatory diathesis. We have also seen spasmodic affections of great severity give way under sponta-

---

* Mr. Edmondston has some ingenious suggestions on the regulation of a police respecting dogs, which, if properly enforced, would go far towards checking this dreadful disease. The necessity for laws to regulate and restrain the indiscriminating propensity, especially among the lowest orders, for keeping this animal, have not escaped the attention of various individuals, and even of governments. Dr. Bardsley of Manchester, a few years since, and Dr. Godelle of Soissons recently, have proposed a mode of extirpating rabies. By a statute passed in the Common-wealth, the owner of every dog is bound to muzzle him if mischievous; and by a regulation of Henry II. of France, in 1556, every dog, the master of which was not known, was killed: and this is still occasionally put in force in Paris. It is of much importance to be able to ascertain the presence of rabies in the dog. Mr. E. has given a history of the symptoms of the disease in that animal, from Rees's Cyclopædia, but as it appears to us to be much more graphically delineated in the work from which the writer of the article "Dog," in the Cyclopædia has manufactured his account, we refer our readers to the original.—Vide *Gillman's Dissertation on the Bite of a Rabid Animal, 8vo. Lond.* 1812.

neous, or accidentally excited, vomiting, of long and severe duration. In the case of hydrophobia related by Dr. Satterly, he says, "*I ought not to pass unnoticed the fact, that during the continuance of the vomiting, the hydrophobic symptoms were materially lessened, indeed the quantity of fluid then swallowed was fully adequate to the support and necessity of the child.*" But the detail is still more remarkable.

On the 12th of November 1808, the patient, a girl eight years old, was brought to the Middlesex Hospital—her pulse 140. She had not swallowed fluid since three o'clock, (whether of the preceding day or of the morning of this day, is not marked,) nor had she vomited. If water or any liquid was offered her, or if she was exposed to a current of air, a violent action of the muscles of respiration, sobbing, and very great general distress was induced. She was extremely sensible to cold, and the least current of air nearly deprived her of the power of breathing. The moment any fluid was brought near her, she looked very earnestly and anxiously at it, opened her eyes staringly, drew in her breath quick, and forcibly inspired two or three times very deeply, sobbed aloud, and then hurried the vessel to her mouth, when she held it some little time between her teeth, before she could summon up resolution to suffer the fluid to touch her lips; the moment the fluid passed into her mouth, a strong convulsion of all the muscles subservient to deglutition and respiration followed, and her distress was indescribable. In the evening no change of symptoms was discovered; mercury, camphor, and opium were employed; and vomiting seems to have been excited by the pills of opium, camphor, and submuriate of mercury, which she had taken.

On the morning on the 13th, "I learned," says Dr. Satterly, "that the vomiting had continued with *great violence* during the night, but that in the intervals she had slept quietly and soundly; that she had swallowed a few spoonsful of tea, and had taken her medicines, with one exception, regularly. At the time of my visit she swallowed easily, and at her own desire took some tea; *the pulse was eighty-eight*, regular and firm, the skin perfectly cool, and the tongue moist; she conversed with great cheerfulness, and amused herself as if nothing ailed her. She ate for breakfast some warm bread and milk, with little if any reluctance; and without spasm swallowed more than a cupful of tea. *The vomiting all this time continued urgent.* The whole of this day, (the 13th,) she swallowed fluids with little if any difficulty or repugnance, calling for drink whenever she felt thirsty; and the symptoms were much moderated, for except the *distress occasioned by vomiting*, the child seemed to be comfortable."

An attempt was now made to restrain the vomiting by the

application of a blister to the stomach. This appears to have succeeded, and the symptoms of the disease increased with the quiescence of the stomach.

On the morning of the 14th, (mis-printed the 15th, we apprehend, in Dr. Satterly's account,) the report was, *that the vomiting had been less violent since the application of the blister*, but that the patient had been extremely restless, frequently starting and screaming, and that she had slept but little and swallowed nothing. From this period we hear no more of vomiting. The interval to the evening of the 17th, when she expired, is filled with details of frightful spasms and convulsions excited by cold air, attempts to drink, and by touching the cold polished surfaces of bodies*.

Our desire to direct attention to the extraordinary fact recorded by Dr. Satterly, must be an excuse for this appearance of prolixity. The curative effects produced by severe and continued vomiting, both on inflammatory and spasmodic affections of the most alarming degree and character, some of which we have ourselves seen, and others are substantiated by the most credible evidence; the reduction of the pulse from 140 to 88, which then also became regular and firm, with a cool skin and moist tongue; and with the suspension of hydrophobia in the case before us—combine to make a deep impression of the power of this agent in combating the most formidable diseases. We are not enough sanguine to feel convinced that vomiting, when pushed to the length Sir W. Adams has employed it, so successfully, in the Egyptian ophthalmia, and to the *great violence* with which it occurred in Dr. Satterly's case, will be a cure for hydrophobia; but we see enough in the extraordinary effects produced by powerful vomiting on all the functions of vitality, to believe that some morbid derangements may be counteracted by emetics, with a celerity and certainty that no other article of the materia medica promises. It is not however with a view to evacuate bile, porracious matter, or any morbid material from the stomach; to promote absorption, to abstract the rabid poison from the habit, or to remove obstructions by concussion, that we would employ emetics: but it is to the controul *violent and*

---

* The protraction of the disease in this case is remarked as a singular fact. The termination of the patient's sufferings by death in rabies is usually four days; in this instance the disease continued seven days. But it may be asked whether the disease actually continued in force during this whole period, or was suspended while severe vomiting continued, and when the pulse had come to its natural standard?

continued vomiting has over the vital principle or its functions, that we refer its remedial powers.

With Mr. Edmondston, we yet cherish the hope, "that there exists in nature a remedy for hydrophobia," and we rest with satisfaction on the exhilarating assertion of Boerhaave, that once great arbiter of medical science and opinions:—"Nec desperandum tamen, ob exempla jam in aliis venenis constantia, de inveniendo hujus singularis veneni antidoto singulari."

II.

Thoughts on Puerperal Fever, and its Cure by Spirits of Turpentine, illustrated by Cases in the Lying-in Hospital, Dublin: also Cases of Inflammation and Spasm, cured by the internal and external Exhibition of that Medicine; with Correspondence on the Subject. By John Brenan, M.D. 8vo. pp. 24. London, 1814.

In the present stage of the evidence given by Dr. Brenan, respecting the internal and external use of spirit of turpentine in puerperal fever, we are called upon only to state the facts as he relates them. These facts are too much out of the common course of medical practice; the effect produced so contrary to every rational conclusion respecting the *modus operandi* of medicines; and the statement at present so loose and imperfect, that decision would be premature.

It appears, in the narrative, that at a time when puerperal fever prevailed to an alarming degree in the Lying-in Hospital in Dublin, and extended very much into private practice, Dr. Brenan was suspected of having given medicine privately to some women, whose restoration could not otherwise be accounted for. This seems to have induced some persons, we may suppose the medical officers of the Lying-in Hospital, though this is only hinted in the narrative, to observe, that if Dr. Brenan could suggest any thing of utility, he should have the whole credit of it.

"Accordingly (he says) I told one of the assistants that I thought I could be of use, and I mentioned a case that was then in a lamentable state. It was Margaret Rogers, in the inner ward of No. 7. She had been bled to the amount of 30 ounces, in two bleedings. She was then sitting up, not being able to bear a supine posture. She was vomiting green and yellow bile incessantly; and the sensibility of the abdomen was such, that she could not bear the most gentle touch of the finger thereon. He told me, that he considered effusion to have taken place; and as this woman was in a rapid state of dissolution, from which no woman similarly affected ever reco-

vered, he wanted to know what I would give her. I told him, the spirits of turpentine. He started, and asked me, how much. I told him, a table-spoonful. This appeared to him a madness: but, as the woman seemed dying, he said I might give a few drops, but that he would not stand by whilst I gave it. Accordingly, at the hour of two, p. m. I gave her three tea-spoonfuls of the spirits of turpentine in a little water. At five o'clock I returned, and the countenance of the assistant expressed the event: he remarked, that the woman was better; and he had the courage to stand by when I gave her a table-spoonful, which he was much astonished did not burn her. He asked her, what she thought it was. She replied, Geneva and water. At nine o'clock we visited her. She lay at her ease. She never vomited from the time she took the turpentine, her abdomen was flaccid, and quite insensible of pain on the pressure of it, though very violent. The next day some pains returned; she took the turpentine; and they ceased. She called for food, and complained of hunger. She never after felt any uneasiness in the region of the uterus. In about four days after she began to spit pus, her pulse sunk, and she died. She was of an asthmatic disposition, and had come from the Lock Hospital, where she took much mercury. The turpentine cured all the symptoms that threatened speedy death. She had no symptom of her puerperal complaint after, and I put her death down to the bleeding.—This case has been objected to me as unfavourable. I cured all I proposed curing; all her puerperal symptoms disappeared: and I fancy the annals of midwifery does not furnish an instance of such relief, in such circumstances, or of any one cured, or even relieved, when the symptoms went to the extent of her case."

Six cases are given in evidence of the efficacy of the spirit of turpentine; the fifth of these, though related in a style that does not recommend it, is a fair specimen of Dr. Brenan's practice.

"Mary Murray, wife to a soldier in the Fermanagh militia, from Kilnese, near Naas, was delivered on Saturday, 12th of the month: on Tuesday the fever set in with her most violently. I was allowed a latitude with this woman, on account of the surprising efficacy of the medicine with Rogers. She had a severe cough, and every time she coughed she screeched with the anguish of her belly, which was insufferably painful to the touch. I applied the turpentine to her abdomen, and gave her a table-spoonful of it in water and sugar. The next day she was free from pain, and able to eat bread and milk for breakfast: she took a drink of cold milk, and got ill as ever. I repeated the turpentine, and applied it to her abdomen. The next day she ate stirabout, and got a relapse from cold beer. She continued very ill till Monday, when the doctor showed her to me as a forlorn case. He showed me the blackness of her hands, which he said was the sure forerunner of death, and that Denman said no woman ever recovered that had it. Another doctor saw her, and agreed that she was one of the patients then moribund. Nothing was ordered for her this day, I suppose from the dreadful state she was

in. This was Monday; she was sitting up vomiting green bile. I gave her an ounce of the turpentine, and repeated it in an hour, and applied it to her belly. The next morning I found her asleep. On Tuesday I gave her castor oil, tinctura sennæ, and two drachms of the turpentine in the draught. This purged her much. On Wednesday she breakfasted on stirabout and milk; on Thursday did the same; on Friday she sat all day at the fire, and was put with the next case I shall mention, to sleep in one bed. On Saturday she requested to be left in the Hospital, and on Sunday she walked home to Barrack-street with her child in her arms. This woman was never bled."

The pamphlet concludes with two letters; one from Dr. Burns of Glasgow, and the other from Dr. Douglass of Dublin, on the employment of turpentine in puerperal fever. From Dr. Burns' letter, dated July 20, 1814, we give the following extract.

"In reply to your question, I have no hesitation in saying, that I believe the employment of turpentine in puerperal fever is new.

"From observing the excellent effect of turpentine when given to my horse as a remedy for colic, and from a knowledge of its safety in the human species when exhibited for the cure of tenia, I have considered it as a remedy deserving trial in spasmodic affections of the bowels: but I confess I would not have thought of employing it where there was any reason to suspect the existence of inflammation.

"Your trials prove, at least, that it is not injurious in that state of the intestine which exists in Puerperal Fever. But I should like to know whether it has ever been given early, and trusted to alone, with decided success.

"As I am anxious for the advancement of my profession, and deem it my duty to attend to every suggestion for improvement, I should wish to be favoured with any well-marked case, substantiating the efficacy of turpentine."

Neither the accident that induced, nor the reasoning that led Dr. Brenan to the employment of *oleum terebinthinæ* in abdominal inflammations of the most violent kinds, are mentioned. We must therefore wait for the further illustration of the preceding account until the publication of his promised "Systematic Essay on Puerperal Fever, and the Application of Turpentine in the Cure of that dangerous Malady."

III.

Flora Americæ Septentrionalis; or, a Systematic Arrangement of the Plants of North America. By Frederick Pursh. Two Volumes, 8vo. pp. 751. Twenty-four plates. Lond. 1814.

Were we to estimate the volumes before us by their bulk, compared with the ponderous tomes which frequently issue from the literary workshops of this metropolis, we should form

a very erroneous idea either of the powers of mind, or the physical labour expended in their production. The peregrinations of twelve years through the vast continent of North America—the author travelling over an "extent of more than three thousand miles each season, with no other companions than" his "dog and gun—frequently taking up" his "lodging in the midst of wild mountains and impenetrable forests, far remote from the habitations of men," produced the materials only of the work; these were still to be wrought up, the Floras of former travellers examined, authorities investigated, and the whole moulded into a proper form for publication, and to prove useful to the science to which these volumes form so important an addition; although the author modestly regards them as the ground-work only of some future more perfect work. The nature of the subject, and the structure of the volumes, may prevent our analysis from being amusing, or even very satisfactory; but we will endeavour to lay before our readers such an account of them as may induce those interested in the advancement of Botanical Science to become more intimately acquainted with the labours of Mr. Pursh, than they possibly can be through the medium of our pages.

In the preface, which contains an account of the particulars of the author's stay in America, a sketch of the state of the science, in that quarter of the globe, is attempted, highly creditable to the botanists of the United States. Among those with whom Mr. Pursh was in habits of intimacy, and who materially assisted him in his researches, we find the names of *Mühlenberg;* Mr. *John Lyon,* who has been the chief introducer of American plants into Europe; Dr. *Benjamin S. Barton,* well known in the philosophical world; Governor *Lewis,* who, under the direction of the United States, traversed the continent of America to the Pacific Ocean, by the way of the Missouri and the great Columbia rivers; and Dr. *David Hossack,* the learned Professor of Botany at New York. The breaking out of the present war with America, determined our author to bring his materials to this country, a circumstance which fortunately enabled him to add much to the value of his work, by the opportunities afforded to him of consulting the most valuable collections and libraries. Of the collections, he considers the Sherardian Herbarium at Oxford, although it was begun a century ago, yet, owing to its fine state of preservation, and the additions which have been made to it by Mr. Tilden of Hudson's Bay, Mr. John Bartram of Philadelphia, and others, to be the most complete collection of North American plants now extant.

With regard to the plan of the work, our author has followed the nomenclature of "Willdenow's *Species Plantarum,*

and Michaux's *Flora Boreali-Americana,* as near as possible, avoiding carefully to change any old established name, however faulty, unless in cases where good authority furnished a more appropriate one." (p. xix.) Although, in general, the specific characters of Willdenow, and other respectable authors, have been adopted without alteration, yet "in many instances they have been modelled anew, or altered, as it was found necessary." The alterations in the systematic arrangement are considerable; but these we shall particularly notice as we pass through the work, and point out the discoveries of the author; and to this part of our task we shall now proceed, in the regular order of the arrangement.

1. Monandria.—In the first order of this class, *Monogynia*, we find *Zostera* and *Caulinia* removed from *Monoecia Monandria*; and in the second order, *Digynia*, *Podostemum* from *Diandria* of the same class: the third order, *Polygynia*, is formed altogether of *Zannichellia* and *Chara*, both from the first order of *Monoecia*. This situation of *Zannichellia*, however, rather surprises us, as the learned President of the Linnæan Society, by whose hints our author acknowledges he has been guided in his alterations, expressly considers it as a genuine example of the class and order from which it is here removed, owing to "its having a different structure in the accessary parts of its barren and fertile flowers*." And to shew the strong manner in which he expresses himself on this subject, we shall transcribe his opinion, with which we decidedly accord, in his own words, from the work we have just quoted. "With respect to those Monoecious and Dioecious genera, whose barren flowers are decidedly unlike the fertile ones, the former being in a catkin, the latter not, I conceive nothing more pernicious or troublesome can be attempted than to remove them to the classes of united flowers†."

2. Diandria.—The alterations in this class, of which there is one order only, *Monogynia*, are *Fraxinus* removed from *Polygamia Dioecia*; *Catalpa* from *Didynamia Angiospermia*, where it was certainly improperly placed by Willdenow as a species of *Bignonia*; *Ceratiola* and *Borya* from *Dioecia Diandria*; and *Lemna* from *Monoecia Diandria*, where it had too long remained.

Under *Veronica* we find a new species, which is denominated *reniformis*, from the shape of the leaves:

"V. spicis lateralibus pedunculatis, foliis oppositis reniformi cordatis inciso crenatis, caule repente.

"Collected by Messrs. Lewis and Clark in boggy soil, on the banks of the Missouri. ♃. June. *v. s. in Herb. Lewis.*"—*p.* 10.

---

* *Introduction to Botany*, p. 473. † *Ibid*, p. 471.

A new species is also added to *Justicia*, discovered by Mr. Pursh on the Islands of Roanoak, in North Carolina, and named by him *brachiata.*

"I. pedunculis axillaribus racemoso-verticillatis: pedicellis geminis, bracteis obovatis trifloris, foliis ovatis acutis petiolis longissimis caule sexangulari ramosissimo."—p. 13.

3. Triandria.—In the first order, *Monogynia*, we find two new species of *Iris*; one discovered by Mr. Enslen, on the banks of the Mississippi, near New Orleans, and named *cuprea*, from its flowers, which are of a beautiful copper colour, veined with purple.

"I. imberbis, caule tereti flexuoso folia æquante, foliis lato ensiformibus, stigmatibus linearibus brevibus, petalis omnibus reflexis emarginatis obovatis, interioribus brevioribus, capsulis magnis hexagonis."—p. 30.

The other our author dicovered in deep swamps, near Egg Harbour, and named it *prismatica.* It flowers in July, pale purple.

"I. imberbis, caule solido folia æquante, foliis angustissimis longis, capsulis elongato-prismaticis utrinque acutis."—p. 30.

In the genus *Cyperus* are three new species, discovered by Mr. Pursh; one named *uncinatus*, growing on gravelly banks of rivers and lakes, in Canada, New York, and on lake Champlain, flowering in June: another, which he names *poæformis*, growing in sandy fields in South Carolina, flowering in July; and a third, named, after Mr. Enslen, *C. Enslenii*, a rare plant, found in ditches, and near ponds, in Virginia and Florida. We must refer our readers to the work for their description.

Although not a new species, yet we cannot avoid noticing our author's observations on *Leersia lenticularis*, Fly-catch Grass, first described by Michaux, (*Flora Amer.* i. p. 39,) and found in wet gravelly soils in Illinois and Virginia, flowering in July.

"This singular and elegant grass," says Mr. Pursh, "I found in the islands of Roanoak River in North Carolina, and observed it catching flies in the same manner as *Dionœa muscipula*: the valves of the corolla are nearly of the same structure as the leaves of that plant."—p. 62.

The only species of *Milium* is a new one, found in light sandy fields of New Jersey, near Egg Harbour, flowering in July and August. It is named *amphicarpon*; and as the plant is singular, and the description concise, we shall transcribe it as a specimen of our author's mode of executing this part of his task:

"*Culmi* plures teretes, vaginati, sesquipedales et ultra.

"*Folia* lato linearia, striata, geniculis breviora, undique pilis longis albidis rigidis tuberculo insidentibus tecta. *Vaginæ* teretes striati; suprema aphylla, more foliorum pilosæ. *Ligula* barbata.

"*Panicula* in summitate culmi, pauciflora, stricta: ramis simpliciusculis; pedicellis florum clavatis. *Glumis* oblongis, acutis, nervosis, æqualibus, glabriusculis. *Floribus* omnibus masculis.

"*Flores* feminei in scapis radicalibus unifloris basi vaginantis. *Flores* ante anthesin erecti, dein reflexi, ad maturitatem seminis magni subrotundi subterranei."—p. 62.

To the genus *Panicum*, two new species are also added; one found in New Jersey, and named *elongatum* from its height, which is sometimes five feet; the other, *Strictum*, was discovered on the banks of the Delaware; both flower in July. We find also a new dwarf species of *Aira*, found on barren clay soil in Pensylvania, flowering in June, scarcely an inch high, in close tufts; and thence named *pumila:* a new species of *Arundo*, from the bogs of New Jersey and Pensylvania, denominated by our author *agrostoides*.

Among the systematic alterations in this class, in the first order, *Monogynia*, we perceive *Sisyrinchium*, which although properly removed from *Gynandria Triandria*, yet is certainly here out of place, as it belongs to *Monadelphia*, on account of the tubular form of the stamens; *Sparganium*, *Carex*, and *Zea*, are certainly improperly removed from *Monoecia*; as also, perhaps, *Typha* and *Scleria*, but this is less clear. In the second order, *Digynia*, are *Zizania*, and *Tripsacum* removed from *Monoecia*: *Anthopogon*, *Antheropogon*, and *Holcus* from *Polygamia*: and in the fourth order, *Polygynia*, *Empetrum* from *Dioecia*.

4. Tetrandria.—This class, although not extensive, yet presents several novelties. In the first order, *Plantago* is enriched with one new species found on the sea coast of New England and New Jersey, and named by Mr. Pursh *pauciflora*. Of *Exacum*, there is one species only, which is a new one, *E. pulchellum*, found by our author near the sea coast of New Jersey. He informs us it is a rare plant; and that the flowers which open in August, and are rose-coloured, "resemble *E. filiforme*." *Swertia*, which we are rather surprised to see in this class and order, has one species also added to it, from the Alpine regions of the white hills of New Hampshire, flowering in June, and named, from its diminutive size, *pusilla*, the whole plant not exceeding an inch in height. *Galium* contains two new species; *micranthum* found in mountain swamps from Canada to New York, bearing very numerous small white flowers, but producing "generally only one seed;" and *brachiatum*, a very common plant throughout New England, and

Virginia. *Diodia* one new species found in sandy fields near Savannah, Georgia, flowering in July, named *hirsuta.*

The alterations in this class are *Swertia*, which we have already noticed with some surprize, removed from *Pentandria Digynia*; but as we have no opportunity of examining the plant at present, either alive or in a dry state, we cannot venture to impeach our author's accuracy: *Boehmeria* and *Urtica* from *Monoecia*: *Viscum* and *Hippophae* from *Dioecia*: and *Parietaria* from *Polygamia Monoecia.*

5. Pentandria.—In *Monogynia* of this class, we observe one new species of *Azalea*, obtained by our author in deep mossy swamps on the mountains from New York to Virginia, and named *Nitida*; its flowers are white with a red tinge, opening in June; its leaves dark, shining, and smaller than any other species. A new *Campanula*, found generally in company with *Veronica scutellata*, in low inundated meadows in Virginia, flowering in July, named by Mr. Pursh *aparinoides.* A *Ceanothus*, named *perennis*, from the roots, for the stems die down to the roots every winter, is found on the rocks near rivers, in Virginia and Carolina; and thus characterised,

" C. foliis ovalibus subserrulatis glabris, paniculis thyrsoideis terminalibus axillaribusque."—p. 167.

Viola contains three new species by our author; the first found in moist meadows and woods, in Pensylvania, flowering in May, and named *dentata*; the flowers resembling, both in colour and shape, the *sagittata* of Willdenow, (Sp. Pl. i. p. 1160.) the second, denominated *papilionacea*, obtained in wet places near Philadelphia, with blue flowers, striated and bearded with yellow, opening in May: and the third, from the fields of Pensylvania and Virginia, where it flowers in May and July, nearly approaching to *V. tricolor*; but with small white flowers, veined with purple, and thence named *bicolor.*

In *Digynea* we are presented with a new *Asclepias*, named *viridiflora*, for the reason implied by the name: it grows in dry fields in Pensylvania and Virginia, flowering in June-July: two new species of *Heuchera*; one named *pubescus*, discovered on the Blue-mountains of Pensylvania and Virginia; the other, *hispida*, on high mountains of Virginia and Carolina, bearing purple flowers; both flowering in May-June: and a new *Celtis*, named *Pumila*, from its size, being a small straggling bush, bearing ovate black berries, found in Maryland and Virginia, on the banks of rivers, flowering in May.

The fifth order, *Pentagynia*, contains a new *Drosera*, which was discovered by our author in 1805, in the pine-barrens of New Jersey, near Tuckerton, and properly named by him *fili-*

formis, from its long thread-like leaves. The flowers are large, purple, and open in June. We transcribe the description, on account of its perspicuity and neatness.

"*Radix:* Hybernaculum squamosum, extus ferrugineo-lanuginosum. *Folia* primordialia glabra, dilatato-subulata; secundaria radicalia spiraliter erumpentia, angustissime linearia subtus glabra, supra pilis rubris viscidis tecta, 9—10 pollices longa. *Scapi* erecti, pedales et ultra, teretes, glabri, interdum vivipari, bulbiferi. *Racemus* spicatus, unilateralis, recurvatus, simplex seu ramosus. *Flores* pedicellati, erecti, magni, purpurei. *Styli* sex, interdum novem."—p. 211.

The following are the principal alterations in this class. In the first order, *Nyssa*, and *Hamiltonia*, removed from *Polygamia Dioecia.* In *Digynea*, *Gelseminum*, the *Bignonia Sempervirens* of Willdenow removed from *Didynamia Angiospermia*, and forming a distinct genus. *Cannabinis*, with little propriety, is placed here, and with still less *Humulus*, which is, in every respect, a dioecious genus. We find also *Celtis*, *Panax*, and *Atriplex* removed from *Polygamia.* In *Trigynia* are *Amaranthus* and *Crotonopsis* removed from *Monoecia;* and *Zanthoxylum* from *Dioecia Pentandria.*

6. Hexandria.—When noticing the parasitic genus *Tillandsia*, Mr. Pursh informs us that the fibres of *T. usneoides*, when deprived of the outside coating, make excellent mattresses, and are a good substitute for horse hair for that purpose." (p. 218.) In the first order our author has inserted two new species of *Prinos*, the one *P. lævigatus*, from the Allegany mountains, flowering in July, and bearing large dark red berries; the other, P. *lanceolatus*, from the low parts of Georgia and Carolina, flowering in June, and bearing small scarlet berries; also a new *Pontedera*, which he has named *angustifolia*, found in the high mountain lakes, New York to Carolina. *Peplis* contains one species only, a new one, P. *americana.*

"P. floribus axillaribus solitariis, foliis crassis spathulato-obovatis, floribus apetalis."

"Inundated during its flowering time, in slow flowing places of rivers, in Pensylvania; the flowers so diminutive, that to examine them requires a strong microscope."—p. 238.

In *Trigynia*, a new species of *Chamærops*, named *Hystris* from its long aculei, resembling porcupine quills, 'found near Savannah, Georgia; a *Veratrum*, from the high mountains of Virginia and Carolina, flowering in June; with greenish yellow flowers, and very long linear keeled leaves, thence its name *angustifolium*: and a new *Smilax*, which Mr. Pursh has named *panduratus*, found in sandy woods, New Jersey to Carolina, flowering in July.

In *Polygynia*, a new *Alisma* discovered in salt marshes on the coast of New Jersey and Pensylvania; and named *parviflora* from the size of the flowers, which open in July.

The alterations in this class are not numerous. In the first order we find *Brodiœa*, which Sir J. E. Smith has described as a triandrous genus*; but as our author saw the plant alive, we are disposed to agree with him that the learned president may have been misled by dried specimens. In *Trigynea* are *Rhapis*, *Veratrum*, and *Chamærops*, removed *Polygamia; Smilax* judiciously brought from *Dioecia Hexandria;* and not less so *Wendlandia* from *Dioecia Monodelphia.*

7. Heptandria.—Contains nothing new.

8. Octandria.—Under *Oenathera biennis*, our author has noted the following curious observation:

"I have frequently observed a singularity in this plant, and it might be interesting to make further inquiry into its cause; it is, that in a dark night, when no objects can be distinguished at an inconsiderable distance, this plant, when in full flower, can be seen at a great distance, having a bright white appearance, which probably may arise from some phosphoric properties of the flowers."—p. 264.

Although several new species are noticed in this class, yet, as they are not the immediate discoveries of our author, we do not think it necessary to notice them. The alterations are also few in number. In the first order, *Diopyros* and *Acer* from *Polygamia;* and in the fourth, *Tetragynia, Myriophyllum* from *Monoecia Polyandria.*

9. Enneandria.—Contains nothing requiring to be noticed.

10. Decandria.—Although extensive, yet this class contains few new species. In *Digynia* we observe a *Saxifraga*, with the specific name *erosa*, taken from the leaves, "foliis oblongo-lanceolatis acutis erosodentatis," discovered in stony rivulets on the high mountains of Virginia and Carolina, flowering in June and July; and in *Pentagynia* a *Cerastium*, found on the banks of the Schuylkill and Delaware, Pensylvania, flowering in May and June, and named *tenuifolium.*

The alterations are *Gymnocladus*, brought from *Dioecia Decandria;* with *Acacia* and *Schrankia* from *Polygamia Monoecia.*

11. Icosandria.—In *Monogynia*, although *Opuntia* is the only species of *Cactus* set down by our author, yet he observes, "that there are two or three more species growing on the Missouri," which he had no opportunity of seeing. In the second order, which he denominates *Di-Pentagynia*, we observe

* *Linnæan Trans. x. p. 2.*

a new *Agrimonia*, named *Sauveolens*, from its flowers having "a very agreeable balsamic scent." It grows on the high mountain meadows of Virginia and Carolina, and flowers in July and August. The alterations in this class are unimportant.

12. Polyandria.— Under *Magnolia auriculata*, a well-known plant which grows in the Allegany mountains, from the head waters of the Susquehanna to Carolina, our author observes:

"The bark of this and some other of the foregoing species (of Magnolia) is esteemed a valuable medicine, particularly in intermittent fevers; from which circumstance it is known in some places by the name of *Indian physic*."—p. 382.

In the third order, *Polygynia*, *Caltha* is enriched with two new species; the first, named *integerrima*, found in wet meadows and small rivulets in New England and Virginia, flowering in May and July: the second, resembling the *Caltha natans* of Willdenow, discovered in a large sand spring on Pokono-mountain, Pensylvania, and named *flabellifolia*. In the same order a new *Ranunculus*, which Mr. Pursh denominates *Cymbalaria*, found by him in salt marshes, near the salt works of Onondago, New York: six new *Sagittaria*, viz. *S. hastata*, in old ditches, Pensylvania; *gracilis*, in bogs and ditches, Pensylvania and Virginia, particularly on the mountains; *heterophylla*, in small ponds and ditches, Pensylvania and New Jersey; *rigida*, in still and deep waters of Oswego river, near the great falls; *simplex*, in small ponds, New Jersey; and *acutifolia*, in small rivulets and ditches, near Philadelphia; all flowering in July and August.

In this class, *Ceratophyllum* and *Sagittaria*, are properly brought from *Monoecia Polyandria;* but *Arum*, which our author has also placed here, is undoubtedly a true monoecious genus; *Datisca* is removed from *Dioecia Dodecandria;* and *Ascyrum*, *Hypericum*, and *Elodea* from *Polydelphia Polyandria*.

13. Didynamia.—In *Gymnospermia*, we find a new species of *Stachys*, discovered on the banks of the Missouri, with blue flowers, which open in July. Our author has named it *Fœniculum*, from the whole plant having "a scent extremely like fennel:" a *Scutellaria*, found on the banks of rivulets in Virginia, "foliis sessilibus ovatis dentatis nervosis," thence the specific appellation *nervosa;* and a *Hedeoma*, named *hispida*, a very low species, not above two inches high, with very small flowers, growing on the banks of the Missouri, flowering in June and July. In *Angiospermia*, a new *Scrophularia*, with greenish yellow flowers, named *lanceolata* from the leaves, found in wet meadows and woods, Pensylvania, flowering in August and September.

The changes in this class are few. *Cunila* is brought from *Diandria,* to which we are disposed to think, with Willdenow and others, that it more properly belongs; for, although there are four filaments, yet two of them are castrated, or bear no anthers. *Verbena,* at least that part of the genus containing those species put down by our author, is with more propriety brought from the same class. This genus has always been a stumbling block to systematics, some of the species being truly diandrous, while the others are tetrandrous, with the filaments arranged in the manner of the *Didynamiæ.* *Gratiola repens* of Willdenow and Swartz is placed as a synonym of *Herpestris micrantha,* which we think doubtful.

14. TETRADYNAMIA.—In this class we have observed two new species only: in *Siliculosa,* a *Myagrum,* named *argentæum,* ("undique cano-tomentosum,") discovered on the banks of the Missouri, bearing yellow flowers; and the whole of the plant having some resemblance to *Alyssum saxatile:* in *Siliquosa,* a *Turritis,* named, from the shape of the leaves, *ovata,* found "on rocks—Pensylvania to Virginia," flowering in May-June.

15. MONADELPHIA.—Although we have not perceived any new species, yet the changes in this class are considerable. In the first order, *Triandria,* we find *Phyllanthus, Momordica,* and *Sicyos* brought from *Monoecia Monadelphia:* and *Melothria* from *Triandria Monogynia.* In *Pentandria,* the second order, we were surprized to find *Passiflora,* which undoubtedly belongs to *Pentandria Tigynia,* and not either to *Gynandria* where it long stood, nor to this class; *Iresine,* brought from *Dioecia Pentandria; Illecebrum, Galax,* and *Lobelia* from *Pentandria Monogynia;* and in *Polyandria, Halesia,* and *Styrax,* from *Pentandria Monogynia.*

16. DIADELPHIA.—In *Decandria,* the fourth order, is a new *Amorpha, A. canescens,* found on the banks of the Missouri and Mississippi, flowering in July and August: a new *Lathyrus,* from the character of its leaves, "foliis 5-jugis," denominated *decaphyllus,* discovered on the banks of the Missouri; a *Dalea,* with small white flowers, opening in July and August, *D. parviflora:* two *Psoralea,* one with lanceolate leaves, hence named *lanceolata,* flowering in July and August; the other, named *argophylla,* bearing purple flowers, and covered with a beautiful silvery tomentum; these three are from the Missouri; and also the next species, which our author quotes from Governor Lewis's Herbal, *P. esculenta:*

"This plant (says Mr. Pursh) produces the famous *Bread-root* of the American Western Indians, on which they partly subsist in winter. They collect them in large quantities, and if for present use, they roast them in ashes, when they give a food similar to yams: if intended for winter use, they are carefully dried and preserved in

a dry place in their huts. When wanted for use they are mashed between two stones, mixed with some water, and baked in cakes over the coals. It is a wholesome and nourishing food, and, according to Mr. Lewis's observation, agreeable to most constitutions; which, he observed, was not the case with the rest of the roots collected by those Indians for food. The root has been frequently found by travellers in the canoes of the Indians, but the plant that produces it has not been known until lately."

A plate of the plant is given.

Among the discoveries in this class and order, also, we find a new *Hedysarum*, named *strictum*, from the pine woods of New Jersey, flowering in July and August: and a *Lotus*, found on the Missouri, and named *sericeus*, from the leaves. "L. foliis ternatis subsessilibus oblongis acutis sericeo-villosis."

17. Syngenesia.—In the first order *Æqualis*, we find a new *Chondrilla*, *C. lævigata*, found in Lower Virginia, and flowering in August and September: a *Prenanthes*, named *juncea* from the Missouri; and another *P. Serpentaria*, the account of which is so interesting, that we shall extract the whole passage.

"9. P. foliis dentatis asperis, radicalibus palmato-sinuatis, caulinis longe petiolatis sinuato-pinnatifidis subtrilobis: lacinia intermedia 3-partita, summis lanceolatis, racemis terminalibus subpaniculatis brevibus nutantibus, calycibus 8-fidis 12-floris.

"On the mountains of Virginia and Carolina. ♃. Aug.—Oct. *v. v.* About two feet high; flowers pale purple. This plant is known by the inhabitants under the name of *Lion's-foot*, and it is in high esteem as a specific in curing the bite of the rattlesnake. During my travels through the mountains of Virginia, I had an opportunity of being a witness of the efficacy of this remedy. A man living in Cove-mountains, near the Sweet-springs, was bit in the foot by a Mocassin snake, a species considered the most dangerous. An inflammation and swelling of his whole leg tookplace immediately; but by taking the milky juice of this plant boiled in milk, inwardly, and applying to the wound the steeped leaves, which were very frequently changed, he was cured in a few days. As this plant deserves the attention of the physician, I have given a figure of it, it being frequently confounded with another species of this genus, which probably may not have quite so strong an effect, as the inhabitants are very careful to have the true *Lion's-foot*, in case of accidents happening, and usually call the other species of Prenanthes *False Lion's-foot*. Gronovius, in his Flora, page 113, mentions Dr. Witt's *Snake-root* under *P. autumnalis* or Willdenow's *rubicunda*, as a remedy for the bite of the rattlesnake; which shows that he had information of the use made of this plant, though he did not know the genuine species. In the Banksian Herbarium is a specimen of *P. rubicunda*, with the following note in the hand-writing of Clayton: "This is the rattlesnake-root that Dr. Witt supposes to be the best cure for the bite of the snake, a very odd plant, hardly two leaves alike upon a plant, as to shape or the indentings of the leaves."—p. 499-500.

Besides these we have a *Sonchus*, named *pulchellus* from the beauty of its flowers, which open in September; found on the Missouri: and a *Eupatorium*, discovered in the New Jersey mountains, flowering in September and October, which our author has named *amœnum*.

In the next order, *Superflua*, we have observed the following new species. An *Arnica*, found on the banks of the Missouri, and named *fulgens*: a *Cineraria*, on dry sunny rocks, in the Blue-mountains, Pensylvania, named *heterophylla* from the leaves—"foliis radicalibus longe petiolatis spathulato-obovatis, ovatis acutiusculis pinnatifidisque, caulinis 2-3-linearibus pinnatifidis," p. 528: a *Senecio*, *S. elongatus*, on rocks, near the banks of rivers: about Euston, Pensylvania, flowering in July and August: an *Inula* with linear leaves, hence named *graminifolia*, found in sandy dry woods; Pensylvania to Florida, flowering from August to October: two *Asters*, found, one on the Missouri, named *canescens*; the other, *reticulatus*, in dry swamps of Carolina and Georgia; both flowering from August to November: and an *Amellus*, on the Missouri, named *villosus*. We were very much surprised to find the following observation under *Solidago odora*; and should have thought it fully as advantageous a trade to carry coals to Newcastle, as tea to China. The plant grows throughout the Allegany mountains.

"This is most generally and principally known among the inhabitants by the name of *Golden-rod*, and used as a wholesome tea. The flowers, gathered when fully expanded, and carefully dried, give a most agreeable substitute for tea, which for some time has been an article of exportation to China, where it fetches a high price."—p. 539.

The other orders of this class contain nothing new.

18. Gynandria.—The first order, *Monandria*, presents us with a new *Orchis*, "foliis planis orbiculatis," and hence named *Orbiculata*, found in shady beech woods, on the mountains of Pensylvania and Virginia, flowering in July-August. The other orders contain no novelty.

As a systematic alteration, we observe *Canna* placed in the first order of this class; but how far this is legitimate, we shall not venture an opinion.

19. Diclinia.—This class, from its name, should contain those plants of the 21st, 22d, and 23d classes of the Linnæan system, which have the male and female organs distinct in separate flowers. By this means the system is undoubtedly simplified; but some of the plants of these classes, which cannot be placed under this new class, cannot either be placed among the united flowers, as we have already pointed out in noticing the alterations; and therefore the propriety of altogether abolishing these classes admits of a query.

In the first order, *Segregatæ*, we observe nothing new. In

the second, *Amentaceæ*, are four new *Salices*, *S. Prinoides*, found on the banks of rivers, Pensylvania to Virginia; flowering in March and April, and resembling *S. discolor*, *S. angustata*, in shady woods, on the banks of rivers, in New York and Pensylvania, flowering in March and April: *S. falcata*, in the same situations; and *S. ambigua*, found in low grounds, in New York and New Jersey. In the third order, the inaccurate criticisms of Michaux on Mr. Lambert's Monograph, are corrected by some observations of Mr. Lambert himself, delivered to Mr. Pursh. This order contains no new genera or species.

The only systematic alteration we have observed in this class, is the introduction of the very natural genus *Euphorbia* under the first order *Segregatæ*; now, although our author has abolished the class *Dodecandria*, to which *Euphorbia* certainly belongs; and we do not pretend to point out in what other part of the system he could have properly placed it, yet, it appears to us very difficult to conceive in what respect it can be regarded as belonging to *Diclinia*.

20. Cryptogamia.—The second order, *Stachyopterides*, presents a new *Lycopodium*, named by Mr. Pursh *tristachyum*, found on high mountains in Virginia, near the sweet springs, flowering in July; and a *Botrychium*, "spicis gracilibus pinnatis erectis," thence named *gracile*; in shady fertile woods, Virginia; flowering in June. In the third order, *Schismatopterides*, a very small *Schizæa*, found in New Jersey, on barren sandy but moist grounds, named from its size *pusilla*. In the fourth, *Filices*, a *Woodwardia*, found in sandy swamps, South Carolina, near Charlestown, flowering in July, named *thelypterioides*: a *Cheilanthes*, on rocks on the Missouri, with triplicate pinnated fronds, "pinnulis ovalibus distinctis apice crenatis aut emarginatis subtus dealbatis," and therefore named *dealbata*.

At the end of the classes, Mr. Pursh has given a very useful table of Anomalous flowers; correct Latin and English, and English and Latin indexes, with an index also of genera and synonyms; and a supplement, with references to the parts of the flower, to which the species it contains belong.

From the analysis we have thus attempted, may in some degree be appreciated the important advantages which Botany has derived from the labours of Mr. Pursh, and his additions to the Flora of the United States. He has besides arranged the more recent discoveries of the American botanists, and corrected some important mistakes into which some of our best systematics have fallen. Although we cannot approve of all the alterations of classification proposed by our author; yet upon the whole, the work is highly creditable both to his industry and talents.—The plates are neatly engraved.

PART III.

SELECTIONS.

Medusas.—" From Corunna to the 36th degree of latitude we had scarcely seen any organic being, excepting sea-swallows, and a few dolphins. We looked in vain for sea-weeds (fuci) and molluscas, when on the 11th of June we were struck with a curious sight, which afterwards was frequently renewed in the southern ocean. We entered on a zone where the whole sea was covered with a prodigious quantity of *Medusas*. The vessel was almost becalmed, but the molluscas were borne towards the south-east, with a rapidity four times that of the current. Their passage lasted near three quarters of an hour. We then perceived but a few scattered individuals, following the crowd at a distance, as if they were tired with their journey. Do these animals come from the bottom of the sea, which is perhaps in these latitudes some thousand fathoms deep? or do they make distant voyages in shoals? We know that the molluscas haunt banks; and if the eight rocks, near the surface, which Captain Vobonne asserts having seen in 1732, to the north of Porto Santo, really exist, we may suppose that this innumerable quantity of *Medusas* had been thence detached; for we were but 28 leagues from this reef. We found, beside the medusa aurita of Baster, and the medusa pelagica of Bosc with eight tentacula (pelagia denticulata, Peron), a third species which resembles the medusa hyoscella, and which Vandelli found at the mouth of the Tagus. It is known by its brownish yellow colour, and by its tentaculæ, which are longer than the body. Several of these sea-nettles were four inches in diameter: their reflection was almost metallic: their changeable colours of violet and purple formed an agreeable contrast with the azure tint of the ocean.

In the midst of these *Medusas* M. Bonpland observed bundles of dagysa notata, a mollusca of a singular construction, which Sir Joseph Banks first discovered. These are small gelatinous bags, transparent, cylindrical, sometimes polygonal, which are thirteen lines long and two or three in diameter. These bags are open at both ends. In one of these openings we observed a hyaline bladder, marked with a yellow spot. The cylinders are longitudinally placed on each other, like the cells of a bee-hive, and form chaplets from six to eight inches in length. I tried the galvanic electricity on these molluscas,

but it produced no contraction. It appears that the genus dagysa, formed at the time of Cook's first voyage, belongs to the salpas (biphores of Bruguière) to which M. Cuvier joins the thalia of Brown, and the tethis vagina of Tilesius. The salpas journey also by groups, joining in chaplets, as we have observed of the dagysa*.

"The morning of the 13th of June, in 34° 33′ latitude, we saw large masses of this last mollusca in its passage, the sea being perfectly calm. We observed, during the night, that, of three species of *Medusas* which we collected, none yielded any light but at the moment of a very slight shock. This property does not belong exclusively to the medusa noctiluca, which Forskael has described in his Fauna Ægyptiaca, and which Gmelin has applied to the medusa pelagica of Lœfling, notwithstanding its red tentacula, and the brownish tuberosities of its body. If we place a very irritable medusa on a pewter plate, and strike against the plate with any sort of metal, the small vibrations of the plate are sufficient to make this animal emit light. Sometimes in galvanising the *Medusa*, the phosphorescence appears at the moment that the chain closes, though the exciters are not in immediate contact with the organs of the animal. The fingers with which we touch it remain luminous for two or three minutes, as is observed in breaking the shell of the pholades. If we rub wood with the body of a *Medusa*, and the part rubbed ceases shining, the phosphorescence returns if we pass a dry hand over the wood. When the light is extinguished a second time, it can no longer be reproduced, though the place rubbed be still humid and viscous. In what manner ought we to consider the effect of the friction, or that of the shock? This is a question of difficult solution. Is it a slight augmentation of temperature which favours the phosphorescence? or does the light return, because the surface is renewed, by putting the animal parts proper to disengage the phosphoric hydrogen in contact with the oxygen of the atmospheric air? I have proved by experiments, published in 1797, that the shining of wood is extinguished in hydrogen gas, and in pure azotic gas, and that its light re-appears whenever we mix with it the smallest bubble of oxygen gas. These facts, to which we shall hereafter add several others, lead to the discovery of the causes of the phosphorescence of the sea, and of that peculiar influence which the shock of the waves exercises on the production of light."—*Humboldt's and Bonpland's Personal Narrative, Transl.* v. i. p. 70.

---

* Account of Voyages undertaken by order of his Britannic Majesty, 1789, vol. iii. p. 261. Ann. du Museum, vol. xiv. p. 360.

NEW FUCUS.—"We were forced by the winds to pass between the islands of Alegranza and Montana Clara; and as none on board the sloop had sailed through this passage, we were obliged to be continually sounding. We found from twenty-five to thirty-two fathom. The lead brought up an organic substance of so singular a construction, that we were for a long time doubtful whether it was a zoophite or a kind of sea-weed. The drawing I made on the spot is engraved in the second volume of our Equinoctial Plants*. The stem of a brownish colour and three inches long, has circular leaves that have lobes, and are indented at the edge. The colour of these leaves is a tender green, and they are membranous and streaked like those of the adiantums and the ginkgo biloba. Their surface is covered with stiff and whitish hairs; before their opening they are concave and enveloped one in the other. We observed no mark of spontaneous motion, no sign of irritability, not even on the application of galvanic electricity. The stem is not woody, but almost of a horny substance, like the stem of the gorgons. Azote and phosphorus having been abundantly found in several cryptogamous plants, an appeal to chemistry would be useless, to determine whether this organized substance belonged to the animal or vegetable kingdom. Its great analogy to several sea plants, with adiantum leaves, especially with the genus caulerpa of M. Lamoureux, of which the fucus prolifer of Forskal is one of the numerous species, engaged us to rank it provisionally among the *sea-wracks*, and give it the name of *fucus vitifolius*. The bristles which cover this plant are found in several other fuci†. The leaf, examined with a microscope at the instant we drew it up from the water, did not present, it is true, those *conglobate* glands, or those opake points, which the parts of fructification in the genera of ulva and fucus contain; but how often do we find sea-weeds in such a state, that we cannot yet distinguish any trace of seeds in their transparent parenchyma.

"I should not have entered into these details, which belong to descriptive natural history, had not the vine-leaved fucus presented a physiological phenomenon of the greatest interest. Fixed to a piece of madrepora, this sea-weed vegetates at the bottom of the ocean, at the depth of 192 feet, notwithstanding which, its leaves were as green as those of our grasses. According to the experiments of Bouguer‡, light is weakened

* Equinox. Plants. t. ii. p. 8. pl. 69.

† Fucus lycopodioïdes, and f. hirsutus.

‡ Traité d'Optique, p. 256, 264, 346. The fucus vitifolius, at the depth of 32 fathoms, can have received a light only 203 times

after a passage of 180 feet in the ratio of 1 to 1477·8. The sea-weed of L'Alegranza consequently presents a new example of plants, which vegetate in a great obscurity without being whitened. 'Several germs, still enveloped in the bulbs of the lily tribes, the embryo of the malvaceæ, of the rhamnoïdes, of the pistacea, the viscum, and the citrus, the branches of some subterraneous plants; in short, vegetables transported into mines, where the ambient air contains hydrogen, or a great quantity of azote, become green without light. From these facts, we are inclined to admit, that it is not only under the influence of the solar rays that this carburet of hydrogen is formed in the organs of plants, the presence of which makes the parenchyma appear of a lighter or darker green, according as the carbon predominates in the mixture*.

"Mr. Turner, who has so well made known the family of the sea-weeds, and many other celebrated botanists, think that the greater part of the fuci which we gather on the surface of the ocean, and which, from the 23d to the 35th degree of latitude, and 32d of longitude, appear to the mariner like a vast inundated meadow, grow primitively at the bottom of the ocean, and float only in their ripened state, when they are torn off by the motion of the waves. If this opinion be founded, we must agree, that the family of sea-weeds offers formidable difficulties to naturalists, who persist in thinking, that absence of light must always produce a whiteness; for how can we admit, that so many species of ulvaceæ, and dictyoteæ, with stems and green leaves, which float on the ocean, have vegetated on rocks almost at the surface of the water?"—*Ibid*, p. 84.

Finland Baths.—" Imagine a stove heated to the utmost. The men enter quite naked, the women in their shifts; the former place themselves on a kind of gallery close to the roof, whilst the women throw boiling water upon the furnace, from which a vapour arises that fills the stove, and xcites a most copious perspiration in less than a minute. The ordinary heat

---

stronger than that of the moon, and consequently equal to half the light of a candle at a foot's distance. But after my direct experiments, the lepidium sativum scarcely takes a tint of green by the vivid light of two lamps of Argand. See also Lambert, Photometria, p. 223.

* These ideas are in part explained in my Memoir on the Phenomenon of *Etiolation (Journal de Physique,* t. xl. p. 154,) and in my *Aphorisms on the Chemical Physiology of Vegetables. (Flora Freibergensis,* p. 179.) See also *Trans. of the Irish Academy,* vol. viii. p. 260.

is from seventy to eighty degrees of Celsius; from fifty-six to sixty-four of Reaumur; and from one hundred and fifty-eight to one hundred and seventy-six of Fahrenheit. It is impossible for any one not accustomed to it to enter, without several times retreating to draw his breath; but as soon as perspiration begins, the heat becomes supportable. When the men descend from the galleries, they are washed in tepid water, and the women rub their bodies with towels, after which they are gently beaten with birch twigs, which is more agreeable in summer from the addition of their leaves. Before the men put on their clothes, they roll themselves in snow in winter, and on the grass in summer. The women then finish their bath in the same manner, except in the latter circumstance. It must be observed, that although naked, nothing passes that can offend the most scrupulous modesty. A woman, who otherwise may not be reserved in her favours, would not suffer the most trifling freedom at the bath. A Fin, who in his own country should not enjoy the bath every Saturday evening at least, would consider himself peculiarly wretched. After the incredible fatigues which these people endure in travelling, or transporting the wood of remote forests, when the snow is from one to two ells thick, a bath recruits their exhausted strength, and renders them fresh and fit to undertake new labours."—*Skioldebrand's Journey to the North Cape, Transl.* 8vo. p. 22.

PART IV.

FOREIGN MEDICAL SCIENCE AND LITERATURE.

PRACTICE OF MEDICINE AND SURGERY.

I.—The attention which is so properly beginning to be bestowed on *Forensic Medicine*, induces us to lay the following case before our readers; not on account of the practice, which *M. Haaf*, the author, candidly admits was defective, but because some of the symptoms are singular, and the examination of the body after death, besides presenting uncommon pathological appearances, throws some light on the effects of narcotic poisons. The case is intitled, "*Observation sur un Empoisonnement, par*

*la Cigue, par I. F. Haaf**, chirurgien aide-major au 122 régiment de ligne."

"Being in garrison at Forrequemada in Spain with the fifth batallion of the hundred and twenty-second regiment of the line, I was requested, on the 2nd of March 1814, at seven o'clock in the evening, to see a grenadier who was said to be dying. I found the patient in a comatose state, and respiring with extreme difficulty. He was lying upon a little straw on the ground, in a small confined room, low, closely shut up, and filled with people and smoke. His pulse was small, hard, and beat scarcely thirty in the minute. His extremities were cold, his face was blue, and turgid with blood like that of a strangled person.

"Having moved the patient from this apartment into the fresh air; on inquiring into the causes of his complaint, I learnt that he had that evening partaken with some of his companions of a dish of soup, which contained several herbs which had been collected in the fields; that after supper the whole of the party felt as if intoxicated, with head-ach, and a peculiar sensation of the throat. This grenadier, whose appetite was at all times good, had eaten more of the soup than the others; and directly after having supped, undressed, and went to bed; and slept, whilst they still remained at the table in conversation; but an hour and a half afterwards, when they themselves began to feel indisposed, they remarked, that the grenadier groaned and breathed with difficulty, which occasioned them to send for me.

"On hearing this recital, I requested that the remainder of the herbs might be brought to me, which being done, I found that they consisted of a mixture of wild chicory, chervil, and hemlock.

"Having thus discovered in the narcotic quality of the hemlock the cause of the accident, I desired that those who felt its effects only slightly, should remain in the open air and drink vinegar; (a practice which was followed with the best effects in all of them;) and confined my attention particularly to the grenadier. I hesitated for an instant whether I should endeavour to make him swallow a large quantity of warm vinegar, to neutralize the narcotic, or open the jugular vein to relieve at once the evident congestion of blood in the head, or finally to evacuate the poison by an emetic. In this moment of indecision I recollected the maxim, *sublatâ causâ tollitur effectus*, and instantly determined to give an emetic. Twelve grains of tartar emetic were now dissolved in warm water, and exhi-

* *Journal de Médicine, &c. Fevrier* 1814, p. 108.

nited in one dose without any dread of the consequences; in the conviction, that the effect of emetics is always proportionate to the degree of sensibility which the stomach enjoys; and it was probable that in this patient the sensibility was so much weakened, that a smaller dose would have been useless. That the operation of the emetic might not be observed by drinking vinegar, I contented myself with making the patient inspire its vapour. In waiting the effects of the emetic, I determined to open one of the jugular veins; but seeing the patient respire with less difficulty, become more sensible, and pronounce these words, "*Ah! now much I feel relieved!*" I dispensed with this operation, and instead of it, applied to the head the refrigerent lotion of Schmucker, at the same time that dry and hot frictions were applied to the extremities, to recall the circulation to them, and relieve the cerebral congestion. Half an hour after the emetic had been taken, the patient made several ineffectual efforts to vomit; and very soon the hopes which an instant before had brightened his condition, now rapidly vanished; he nevertheless still spoke, and complained of being very cold; but his speech and powers of observation soon left him, and the continual palpitations of the chest, and the epigastric region, alone indicated the extreme degree of anguish which he suffered. Without therefore waiting any longer the operation of the emetic, I ordered him to be made to swallow some warm vinegar, and to be rubbed without ceasing, whilst I went to procure a lancet to open the jugular vein; but a few moments before I could return, the patient breathed his last, exactly three hours after the fatal supper.

"*Dissection.*—The body was opened next day, and presented the following appearances:

"The exterior displayed nothing remarkable. The stomach, which was partly filled with undigested aliment, composed of the ingredients of the soup which had been taken on the preceding evening, was in its natural state, except that it appeared less moist than usual. Round the pylorus a few red and slightly inflamed spots were perceptible, which I attributed to the emetic. The liver was of an extraordinary size, but in other respects perfectly healthy. The intestines and other abdominal viscera were in a natural state. There was no blood in the vena cava and the heart. The chest was narrow; the left lobe of the lungs healthy, but the right lobe completely destroyed by previous suppuration. The extraordinary disorganization of the half of this viscus induced me to inquire into the general state of health of the subject, when I was informed that he was robust and vigorous, thirty-five years of age, and had never been absent from duty, although he had

been occasionally teazed by a dry cough, accompanied with difficult respiration.

"On opening the cranium, scarcely had the saw cut through part of the frontal and the right temporal bone, when the blood poured through the opening in such abundance, as to interrupt the operation; and to fill twice an ordinary sized chamber pot*. On elevating the skull-cap all the vessels of brain were perceived extremely turgid with blood.

"From this case the following conclusions may be drawn:

"That it is dangerous to give emetics in similar cases when the poison has already produced its effects; because the efforts to vomit may increase the dangerous determination of blood to the brain. It is only directly after the narcotic has been taken, and before it has excited its peculiar symptoms, that an emetic can be advantageously exhibited; but after this period the vegetable acids should be preferred, because they may neutralize its action. Sugar, salt, onions, mustard, horse-radish, pepper, are also very useful, both as remedies against, and for preventing accidents from, narcotics; because they greatly promote the secretion of the gastric juice, and consequently the digestion of the ingesta; and perhaps mushrooms, all of which are more or less narcotic, should never be eaten without the addition of a large quantity of these spices.

"The opening of the jugular vein ought never to be omitted in urgent cases, for by this means only can the dangerous accumulation of blood in the brain be relieved. The cold applications to the head, as they favour absorption, may also be useful in such cases. In order at the same time to produce a salutary derivation, the pediluvium and partial hot baths should be employed; the extremities stimulated by the application of horse-radish, sinapisms, and cantharides; and the actions of the intestinal canal excited by irritating glysters, composed of warm vinegar, salt, mustard, pepper, and onions.

II. *Removal of a Polypus of the Uterus by Ligature, after artificially dilating the orifice of that Organ.* By M. BONNIE†.

"Madame M——, 39 years of age, after having had three children, with all of which her labours were favourable, was

---

* The Editors of the 'Journal de Medicine' properly observe, that there must be some mistake in the quantity, as the cranium could not hold so much blood independent of the bulk of the brain: but the quantity may be nevertheless supposed to have been uncommonly great.

† From a report of M. DUBOIS and M. BECLARD, *Bulletin de la Faculté et de la Société de Médicine de Paris,* 1814, *No.* 1. *p.* 26.

attacked, in the month of September 1812, with a uterine hæmorrhage, which ceased at the end of five months; but again returned four months afterwards, and produced such a degree of general debility, as excited apprehensions for her life. M. Bonnie was consulted. He first endeavoured to ascertain, by an examination, the cause of this hæmorrhagy, and whether it was of a nature that admitted of being relieved. By forcing the end of his finger into the uterus, he discovered, that this organ enclosed a polypus, which was the cause of the symptoms under which his patient laboured. M. Bonnie conceived, that a ligature might be carried into the uterus, if the orifice could be sufficiently dilated by conical sponges, compacted by pressure and carried into this narrow opening by means of a flexible stem, which, by one of its extremities, should traverse them nearly the whole of their length. The first sponge, swelled by the humidity of the organ, began the dilatation, whilst a second and a third, of encreased size, successively introduced, opened more and more the orifice of the uterus, so that several fingers could be introduced, the tumour examined through its entire length, and its attachment to the fundus ascertained. M. Bonnie then proceeded to surround the polypus with a ligature, following the method of *Desault*, with this modification, that instead of using a single canula for the ligature, with only one slit conductor for passing it round, two instruments of the latter kind were employed. The constriction of the pedicel of the tumour thus effected soon brought it away, and the health of the patient was rapidly re-established. *M. Beclard* witnessed the operation, and assisted *M. Bonnie.*

"This operation," say the reporters, "appears to us to be particularly remarkable in regard to the mode of accomplishing the preparatory dilatation, which was absolutely necessary before the ligature could be applied."

CHEMISTRY.

III.—Our last number contained a translation of the first section of *M. Theodore de Saussure*'s interesting paper on the composition of alcohol and of æther. We have now, agreeably to our promise, to present our readers with a translation of the second section, which treats of the *Analysis of Sulphuric Æther.*

"§ 5.—*Decomposition of Æther by an incandescent Porcelain Tube.*

"The æther which I employed in these experiments was rectified by three successive operations. 1°. It was distilled from a solution of potass, till one half passed over. 2°. This product was washed with twice its weight of water. 3°. The washed æther was re-distilled with muriate of lime, at a temperature of 33° *centig.* until one third part only passed over.

The æther thus procured had a specific gravity of 0,7155, at 20° of the centigrade thermometer.

"I distilled, at a heat inferior to that of boiling æther, 47 grammes of this æther, through an incandescent porcelain tube, in an apparatus similar to that employed for the analysis of alcohol. The operation lasted nine hours; and furnished

"1°. In the porcelain tube, a small portion of charcoal, which weighed 0.12 of a gramme.

"2°. A brown, fluid, volatile, empyreumatic oil, soluble in alcohol; then a blackish substance, thick, soluble in æther only, and resembling tar; lastly, some crystals in thin plates, less volatile than the brown oil, and resembling those produced from alcohol by a similar process*. The mixture of these three substances weighed 0.4 of a gramme.

"3°. 55,850 litres of gas at 16,25 degrees of the centigrade thermometer, 0,7309 of the barometer, and at the extreme of humidity. The first portions, forming a third of this product, contained $\frac{1}{100}$ of their bulk of carbonic acid gas; the other were altogether free from it. The 55,850 litres weighed 43,245 grammes; but as it was not free from water, it is probable that the gas, before it passed to the hydro-pneumatic trough, was free from hygrometrical water; in which case it would have weighed only 42,36 grammes. The gas brought over with it a yellow vapour, which seemed to be formed from the fluid empyreumatic oil, noticed in the second product; it was very copious when the porcelain tube was less hot, and the distillation more rapid.

Forty-seven grammes of sulphuric æther, therefore, produced by this operation,

42,36	grammes of gas,
0,12	——— of charcoal,
0,40	——— of oil of tar.
42,88	
4,12	loss
47,00	

This loss, which amounts to about nine per cent., and

"* They are soluble in alcohol; disappear in water after some days; and burn in oxygen gas at a red heat, and when in a state of vapour; but are not decomposed by this gas by repeated volatilizations at a temperature inferior to incandescence. Oil of rosemary and of lemon peel, also furnish these, but I have never been able to obtain them in sufficient quantity to ascertain accurately their nature and properties."

seemed to be owing to the volatilization of an undetermined oil, is too large for the products which were collected, to permit a perfectly accurate idea to be formed of the composition of æther. Some approximation, however, towards it may be obtained by the analysis of the gas which forms $\frac{8}{10}$ of the fluid which was decomposed.

" § 6.— *Analysis of the Oxicarburetted Hydrogen Gas procured by the Distillation of Æther through an incandescent Porcelain Tube.*

" The specific gravity of this gas (the small quantity of carbonic acid gas spoken of (§ 5.) being abstracted) increased when the distillation was more rapid, and the heat sustained by the gas less. At the greatest degree of gravity, the cubic decimetre of the gas weighed 0,85808 of a gramme, at 0 of the centigrade thermometer, 0,76 of the barometer, and at the extreme of dryness.

" One hundred parts in volume of this gas, mixed with 300 parts of oxygen gas, consumed, when burnt over mercury, 152,48 parts of oxygen gas in forming 101,89 parts of carbonic acid gas.

" One hundred parts of this oxicarburetted hydrogen gas were therefore formed of

63,86	parts of carbon,
22,01	——— oxygen,
14,13	——— hydrogen.
100,00	

" These products contain 11,21 parts of hydrogen in excess over 24,93 parts of water reduced to its elements.

" Two thirds of the gas, formed in the whole of the operation, was nearly of the same nature as to composition.

" When the oxicarburetted hydrogen gas was of the least specific gravity, the cubic decimetre weighed 0,81196 of a gramme, under the same circumstances as in the preceding experiment. One hundred parts in bulk of this gas consumed 143,32 parts of oxygen in forming 93,15 parts of carbonic acid gas. It thence results, that 100 parts by weight of this oxicarburetted hydrogen gas contain

61,7	parts of carbon,
23,49	——— oxygen,
14,81	——— hydrogen.
100,00	

"In these products there are 11,7 parts of hydrogen in excess over 26,6 parts of water reduced to its elements.

"This gas has in its different degrees of specific gravity this property, in common with alcohol, and the oxicarburetted hydrogen gas obtained from it, *that the oxygen gas consumed is to the acid gas produced as three is to two.* Whence it results, that the oxicarburetted hydrogen gas of æther is represented in the preceding analysis by the olefiant gas and the water. The oxicarburetted hydrogen gas which is procured from alcohol, is represented by the olefiant gas and half its weight of water, or from experiment, by the elements of 100 parts by weight of olefiant gas, and 47,6 parts of water.

"The oxicarburetted hydrogen gas which has been obtained from the decomposition of æther by the same degree of heat as that employed for the decomposition of alcohol, is represented by the elements of olifiant gas, and of one third of its weight of water.

"§ 7.—*Analysis of Sulphuric Æther by detonating its elastic Vapour with Oxygen Gas.*

"In my first inquiries regarding the composition of æther, I pursued the following method of analysis:—The oxygen gas was saturated with the elastic vapour of æther; and the superabundant fluid, after this saturation, was taken up by bibulous paper: the increase of bulk that the gas had acquired was measured by the presence of the vapour; and after having weighed the gas thus dilated, it was detonated over mercury, with a further addition of oxygen gas. The first operations were independent of each other, and they required an identity of temperature and pressure which was difficult to be obtained. In separating also, by means of dry paper, the fluid æther from the ætherial vapour, I conceived that the vapour was not condensed; but new researches into the absorption of gases by porous solids, have demonstrated the contrary to be the fact, although the paper may not otherwise act upon the æther.

"The process which I now followed was more simple, and much more exact. 1°. A quantity of æther, considerably less than was required for saturating some dry oxygen gas, contained in a tall straight receiver over mercury, was weighed in a small glass flask with a wide mouth; 2°. the flask inverted was opened under the mercury, and introduced into the receiver: 3°. the volume of the gas was measured, after the solution of the æther in the oxygen gas; so that an ætherial gas being thus obtained without any fluid æther, and under circumstances the most advantageous for the analysis, the quantity of oxygen gas and æther which it contained was easily known.

"I added, for example, 0,525 of a gramme* of liquid æther to 526,76 cubic centimetres of dry oxygen gas, reduced to the barometrical pressure of 0,76, at 0 of the centigrade thermometer. In half an hour all the liquid æther had disappeared, and the gas, dilated by the ætherial vapour, occupied under the same pressure and temperature 682,87 cubic centimetres.

"I then passed this ætherial gas into the detonating tube, placed over mercury, and detonated it by means of the electric spark, after having added to it four times its volume of oxygen gas; for without a large dose of this, the eudiometer would have broken. The 5,25 decigrammes consumed 1008,6 cubic centimetres of oxygen gas, in forming 661,4 cubic centimetres of carbonic acid gas.

"In another experiment, still more accurate, because it was made with oxygen gas less deteriorated with azote, 5,4 decigrammes of æther, under circumstances similar to the preceding, expanded 525,81 cubic centimetres of oxygen gas to 687,23 cubic centimetres. This quantity consumed, when detonated, 1027 cubic centimetres of oxygen gas, in forming 682,8 cubic centimetres of carbonic acid gas. Thence it follows that 100 parts, by weight, of æther contain

67,98	parts of carbon,
17,62	—— of oxygen,
14,40	—— of hydrogen.
100,00	

"In these products there are 12,07 parts of hydrogen in excess over 19,95 parts of water reduced to its elements.

"This excess of hydrogen is to all the carbon contained in the æther as 1: 5,63, or, in other words, *the volume of oxygen gas consumed by the æther, is to the volume of carbonic acid gas, which is produced at the same time, in the relation of three to two*, as is found in the oxicarburetted hydrogen gas of alcohol, in that of æther, and finally in olefiant gas. If to the 67,98 parts of carbon (in the 100 parts of æther analysed) be added the above 12,07 parts of hydrogen in excess, a compound of 80,05 parts are obtained, constituted like olefiant gas†: the 19,95 which remain are water. *Æther is therefore represented by the elements of* 100 *parts by weight of olefiant gas, and* 25 *parts of water.*

"* I could easily have made this experiment on a greater scale; but it would not have been more accurate, because eudiometrical errors are infinitely greater than those of weight, which was ascertained by a balance sensible to less than a milligramme."

"† If the principles of olefiant gas such as I have pointed out

"This analysis of æther strikingly confirms the justness of Count Rumford's observations, made in his inquiries regarding the caloric disengaged during combustion. This philosopher, comparing the heat produced by the combustion of æther with the heat which would have been produced by the elements of this fluid, such as I have stated them in my first results, (*Journal de Physique*, 1807,) found by his calorimeter, that they ought to contain an excess of hydrogen. He confirmed, by this experiment, my first analysis of alcohol; but this agreement might exist with an inaccurate analysis, when the errors counterbalance it.

" § 8. *Recapitulation of the principal Results of the preceding Inquiries.*

" Æther and alcohol are two combinations of water and olefiant gas, reduced to their elements.

" The gases which are produced from the decomposition of æther and of alcohol by an incandescent tube, are the same.

" Æther of a specific gravity of 0,7155, at 20° of the centigrade thermometer, is represented by the elements of 100 parts by weight of olefiant gas and 25 parts of water.

" Alcohol is represented by olefiant gas, united to a much greater proportion of water, and which may be regarded as approximating to half the weight of the olefiant gas.

" The alcohol of Richter, or the alcoholic fluid endowed with a specific gravity equal to 0,792, at 20° of the centigrade thermometer, is represented by 100 parts of olefiant gas and 36,6 parts of water. As this alcohol contains an indeterminate quantity of accidental water, it is confounded (in the 63,6 parts which I have indicated) with the water essential to the real or pure alcohol*.

(§ 3,) be substituted for these 80,05 parts, they will be found to contain

68,07	parts of carbon,
11,98	—— of hydrogen.
80,05	

"* Among the conjectures that may be hazarded regarding the quantity of water essential to real alcohol; that which appears the most probable to me is, that it contains double the quantity of elementary water which is found in æther; that is to say, that alcohol is represented by 100 parts of olefiant gas, and 50 parts of water, or very nearly the same as the gas which results from the decomposition of aqueous alcohol by a red hot tube, (§ 6.) One hundred parts therefore of the alcohol of Richter should be formed of 91,7 parts of real

"One hundred parts by weight of the alcohol of Richter contain 51,98 parts of carbon,

51,98	parts of carbon,
34,32	—— of oxygen,
13,70	—— of hydrogen.
100,00	

"There are here 9,15 parts of hydrogen in excess over 38,87 parts of water.

"One hundred parts by weight of sulphuric æther, of a specific gravity of 0,7155 at 20° of the centigrade thermometer, contain

67,98	parts of carbon,
17,62	—— oxygen,
14,40	—— hydrogen.
100,00	

In these products there are 12,07 parts of hydrogen in excess over 19,95 parts of water reduced to its elements.

"This analysis of æther is more accurate than that of alcohol, as far as relates to the proportion of water; not only because the æther has been analysed by a more direct process, but also because water being scarcely soluble in æther, it can contain a very small portion only of accidental water.

"For ascertaining the proportion of olefiant gas in alcohol, in æther, and in the gases which these fluids produce when decomposed in a red hot tube, it is only requisite to add to the carbon indicated by the analysis the hydrogen in excess. Thus it appears that the weight of olefiant gas in 100 parts of æther, is equal to 67,98+12,07=80,05, and the remaining 19,95 parts are water.

"The volume of oxygen gas which the alcohol consumes in burning, is to the volume of carbonic acid gas produced at the same time, in the relation of three to two, as in the olefiant gas; the trifling errors inseparable from such observations being excepted. One gramme of the alcohol of Richter consumed 1449,8 cubic centimetres of oxygen gas, in forming

---

alcohol, and 8,3 parts of accidental water; and 100 parts of real alcohol should contain

56,68	parts of carbon,
29,44	—— oxygen,
13,88	—— hydrogen.
100,00	

Here there is 9,98 parts of hydrogen in excess over 33,34 parts of water reduced to its elements."

966,54 cubic centimetres of carbonic acid gas, these gases being at 0 of the centigrade thermometer, 0,76 of the barometer, and at the point of extreme dryness.

"The same relation of three to two occurs between the oxygen gas consumed, and the carbonic acid gas formed, in the combustion of æther; one gramme of æther consumes 19,02 cubic centimetres of oxygen gas, in forming 12,64 cubic centimetres of carbonic acid gas.

"The same relation of three to two exists also between the products of the combustion of the gases produced during the decomposition of alcohol or of æther, by an incandescent porcelain tube; 100 parts in bulk of the gas obtained by the decomposition of alcohol, consume 121,95 parts of oxygen gas, in forming 81,15 parts of carbonic acid gas. The cube decimetre of this oxicarburetted hydrogen gas weighs 0,75804 of a gramme; 100 parts by weight contain

57,574	parts of carbon,
28,466	——— oxygen,
13,96	——— hydrogen.
100,000	

Here there are 10,189 parts of hydrogen in excess over 32,237 parts of water reduced to its elements.

"One hundred parts in bulk of the gas from the decomposition of æther consume 152,48 parts of oxygen gas, in forming 101,89 parts of carbonic acid gas. The cubic decimetre of this oxicarburetted hydrogen gas weighs 0,85808 of a gramme; and 100 parts by weight contain

63,86	parts of carbon,
22,01	——— oxygen,
14,13	——— hydrogen.
100,00	

The hydrogen in excess in these products is 11,21 parts over 24,93 parts of water reduced to its elements.

"The volume of the hydrogen gas in excess over the elements of the water, whether in the alcohol, or the æther, or the oxicarburetted hydrogen gas, or the olefiant gas, is equal to the volume of carbonic acid gas which each of these substances produce in its combustion.

"From this property, or from the relation of three to two which we have spoken of, the proportion of the three elements in any known weight of æther or alcohol, may be established, in having one only of the three following points given: (a) the hydrogen in excess over the elements of the water;

(*b*) the oxygen consumed in the combustion; (*c*) the carbonic acid produced by that operation.

"Since alcohol is represented by olefiant gas united with a quantity of water equal to half the weight of the gas, while æther is formed by olefiant gas united with a fourth part only of its weight of water; and finally, since olefiant gas contains no water; it is evident that it is the action of the sulphuric acid upon the alcohol that forms the æther and olefiant gas; in both cases it attracts the water essential to the alcohol. When alcohol is mixed with its weight of sulphuric acid, the quantity of acid employed is sufficient to attract one part only of the water essential to the alcohol, and æther is obtained; when four times the quantity of acid is used, the whole of the essential water of the alcohol is taken up, and olefiant gas is obtained.

"A certain quantity of the alcohol in these operations, by the too energetic action of the sulphuric acid towards the end of the distillation, appear to suffer a decomposition posterior to that which is requisite for forming æther or olefiant gas; whence a black carbonaceous matter, the residue of the distillation of the mixture, is formed. This last decomposition is the cause that a much smaller quantity of æther than is contained in the elements of alcohol is usually procured; two parts of the alcohol of Richter contain the elements of about one part and a half of æther, but scarcely more than two-thirds of this quantity can be obtained from it.

IV.—*Chemical Examination of some Intestinal Calculi.*—Read at the Société Medicale d'Emulation. By M. ROBIQUET, Professor in the School of Pharmacy*.

"THESE calculi differed very considerably from each other, both in figure and size. The largest was regular and egg-shaped, and weighed about a gramme. The others were much smaller, mammillary, and covered with asperities; and nearly resembled mulberry calculi; they were nevertheless far from being solid, and were broken by the least pressure. All of them were formed of very distinct layers, without having any particular nucleus.

"The largest calculus, however, was denser towards one of the extremities of its small diameter, and the layers were in that part agglutinated by a compact brown substance, which appeared to be stercoraceous matter. The layers became thinner also towards this point, which seemed to be the base of the calculus, and whence a true eccentricity resulted.

"The odour of these calculi was extremely fœtid. The

* From the *Journal de Médicine, Chirurgie, Pharmacie, &c. tom.* xxviii. *p.* 391.

powder of the purest of the layers was of a grey colour, light, floated on water, and when thrown upon hot coals emitted a smoke with the smell of heated fat. This powder, rubbed up with a little distilled water, and extended upon *litmus* paper, occasioned no change of colour. Ground with some moistened caustic potass, it neither disengaged any trace of ammonia, nor lost any weight. No sensible action was produced on it by boiling water; but alcohol partly dissolved it, and the solution being evaporated, left upon the capsule micaceous lamellated crystals, resembling those furnished by biliary calculi when treated in a similar manner. The residue of this powder, or that portion not dissolved by the alcohol, was taken up by weak nitric acid; and this solution being divided into several portions, was submitted to the following examination:

"Acetate of lead formed in it a white precipitate, which being collected and dried, was not decomposed by heat, a proof that it was not any animal matter united with the oxide of lead; and, as it melted before the blow-pipe, the globule on cooling was covered with a number of facettes; I was authorized to conclude, that the precipitate was phosphate of lead, and consequently that the calculus under examination contained phosphoric acid.

"The same nitric solution tested by oxalate of ammonia, afforded a granular precipitate, which did not readily coalesce by rest, and had every character of oxalate of lime.

"Being thus convinced that these intestinal calculi contained phosphate of lime, I was anxious to ascertain whether this salt was accompanied with phosphate of magnesia, which is the case in a great number of calculi found in the bladder of urine. For this purpose, having taken another portion of the nitric solution, which contained an excess of acid, I added to it some ammonia. It is well known, that this alkali, united to an acid, is enabled to retain magnesia also in combination, or forms with it a triple compound; hence the phosphate of lime only was precipitated by this experiment. I now separated this by filtration, and having added some lime water to the filtred solution, boiled it: a few light floculi in an inditerminable quantity only were preceptible.

"This experiment was certainly not completely conclusive of the absence of magnesia in these calculi for; it frequently happens in decompositions, that a substance, particularly when it is in excess, carries with it at the instant of its separation, either a part or the whole of any body with which it may be united, and from which it is to be separated. Hence chemists never draw their conclusion from a single experiment; but the quantity of matter upon which I had to operate, prevented me in the present instance from adopting this precaution.

"From these preliminary essays therefore, it is evident,

the intestinal calculi, under examination, partook of the nature of both biliary and urinary calculi.

"The little action which distilled water exerted on them, sufficiently demonstrated that they contained no picromel like the biliary calculi examined by Dr. *Orfila.*

"Their insolubility in water, and the circumstance of their not affecting *litmus*, proved, that no uric acid enters into their composition, at least not in a free state; and we may also conclude, from no traces of ammonia being observed on the addition of caustic potass, that they contain neither the urate of ammonia, nor any ammoniaco-magnesia phosphate.

"I am therefore obliged to consider these calculi as altogether composed of that fatty matter denominated adipocire by *Fourcroy*, of phosphate of lime, and an extremely minute portion of animal matter.

"Notwithstanding the smallness of the quantity I had to operate upon, I endeavoured to ascertain the proportion of the different components, in the following manner. Having taken five decigrammes of the powder of these calculi, I treated it with boiling alcohol, and repeated the operation until the whole of the soluble matter was taken up. The insoluble residue being collected and dried with the greatest possible care, weighed two decigrammes; hence three decigrammes of the fatty crystalline matter must have been dissolved. The two decigrammes of insoluble matter being treated with weak muriatic acid; and the solution precipitated by ammonia, yielded fifteen centigrammes of phosphate of lime.

"The residue from the muriatic acid, weighed four centigrammes; it burnt completely away, and emitted, during its combustion, the smell of burning horn.

"From these results it may be inferred, that one gramme of the calculus consists of

"Fatty matter......................	0, gr. 6
"Phosphate of lime..............	0, — 3
"Animal matter.....................	0, — 08
"Loss....................................	0, — 02
	1, — 00

"The nature of intestinal calculi is very little known; and it is to be regretted, for the sake of science, that they have not been more minutely investigated."

MATERIA MEDICA.

V.—The number of the Clinical Annals of the Society of Medicine of Montpellier, for October last, contains 'some

inquiries into the antiseptic properties of several of the vegetable febrifuges, by Monsieur I. S. E. Julia, chief operator and joint professor of pharmaceutic chemistry to the faculty of medicine of Montpellier.' The paper is intitled, '*Recherches sur l'Antisepticité de quelques Végétaux indigènes, comparée à celle du quinquina, suivies d'un aperçu sur l'Analyse Chimique de ces Substances.*'

M. Julia, reflecting on the opinion of Sir J. Pringle, and of many other physicians, that the febrifuge virtue of cinchona depends on its antiseptic property, resolved to ascertain by experiments the relative quantity of this principle possessed not only by the different species of cinchona, but by several of the other vegetable febrifuges. With this view he selected the substances contained in the following table; and, having reduced them separately to fine powder, placed in contact with each of them a determinate quantity of raw beef; and accurately noted the commencement and progress of its putrefaction; taking care to regulate the temperature, humidity, and every other circumstance that could in any degree influence the process of decomposition. The same experiments were repeated with the infusions and decoctions of these vegetable bodies. The following are the conclusions drawn from the results of M. Julia's experiments:

"1. Vegetable matters are more antiseptic in substance than in infusion.

"2. Infusions are more antiseptic than decoctions.

"3. Decoctions possess very little of the antiseptic principle.

"4. Infusions and decoctions of chamomile (Anthemis *nobilis)*, of common wormwood (Artemisia *vulgaris)*, and the bark of horse-chesnut (Æsculus *hippocastanum)*, are not at all antiseptic.

"5. The root of gentian (gentiana *lutea*) in substance, and also in infusion and decoction, is more antiseptic than any of the other indigenous febrifuges, and even than the three officinal species of cinchona: hence if the febrifuge virtues of vegetable matters depended on their antiseptic properties, gentian ought to be a better febrifuge than cinchona.

"6. The pale cinchona bark in powder is more antiseptic than the yellow bark, and this than the red. The bark of the horse-chesnut, the lesser centaury (chironia *centaurium)*, the bark of the oak (quercus *rubor*), and chamomile flowers, in substance, have the same degree of action as the yellow cinchona bark in powder.

"7. The red cinchona, in the state of infusion and decoction is more antiseptic than the pale; and the pale than the yellow.

COMPARATIVE TABLE

Of the Time which the above-mentioned Vegetable Matters in substance, in infusion, and in decoction, preserve Meat.

Substances employed.	Number of days that the meat was preserved.		
	In substance.	*In infusion.*	*In decoction.*
Gentian Root……… Pale Cinchona……	More than a year. The second year the meat was attacked by worms………	8 days……… 4………	5 days 3¼
Yellow Cinchona……	10 & 12 days.	3………	2½
Red Cinchona………	5 and 7………	4¼………	3½
Bark of ths Horse Chesnut………	8………	3¼………	2½
Chamomile Flowers…	10, 7, and 6….	2………	2
Lesser Centuary…….	7………	6………	6
Oak Bark………	6………	2………	2
Wormwood………	11, 4, and 2…	2………	2
Willow Bark………	………	3¼………	2¾

The infusions of all the substances mentioned in the table were submitted to the action of the following re-agents:—gelatine, carbonate of potass, lime water, dried sulphate of iron, tartrate of antimony and potass, nitrate of barytes, and oxymuriatic acid. The results of these trials proved that all these febrifuge substances agree in some particulars: for example, all yield a greenish precipitate, with dried sulphate of iron. The bark of the horse-chesnut is the only one which, like cinchona, yields, with lime water, a rose-coloured precipitate; whilst all the others yield a yellow precipitate. Tartar emetic is not decomposed by the infusions of the bark of the horse chesnut, of gentian root, lesser centuary, and common wormwood; but it is instantly decomposed by the infusion of cinchona bark, that of chamomile flowers, oak bark, and willow bark.

BOTANY.

VI.—*Continuation of Koelreuter's Dissertation on the Anther Powder of Plants, (from p. 347.)*

"§ 35.—I have drawn up a table of all those species, the colour of which I defined in my preceding dissertation, and distributed them according to figure and conformation, that the great diversity of the anther powder may be perceived as if at one view. These species of anther powder are divided into classes and orders according to their natural figure, which I believe I have correctly determined in the greater number of instances. If, however, errors be found in the arrangement of

some of the species, I trust the difficulty of defining their natural characters, and particularly the defect of sufficient and proper terms of distinction will be a sufficient apology.

TABLE.

Those marked with an asterisk are divided on every side into areolas, frequently hexagons, and hence appear round and angled. (Rotundato-angulati.)

SPECIES WITH A SMOOTH SURFACE.

ROUNDISH:

(*a*) *with the Surface equal.*

Alpinia *spicata*
Utricularia *vulgaris*
Collinsonia *canadensis*
Piper *verticillatum*
Crocus *sativus*
Phleum *pratense*
Dactylis *glomerata*
Scabiosa *Succisa*
Asperula *cynanchica*
Plantago *major*
——— *media*
——— *lanceolata*
——— *alpina*
Rivina *humilis*
Alchemilla *vulgaris*
Potamogeton *natans*
Sagina *procumbens**
Phlox *glaberrima*
—— *paniculata*
Convolvulus *sepium*
——— *tricolor*
Polemonium *cæruleum*
Campanula *patula*
——— *Rapunculus*
——— *Speculum* ♀
Phyteuma *orbicular*
——— *spicata*
Trachelium *cæruleum*
Mirabilis *jalapa*
——— *dichotoma*
——— *longiflora*
Datura *stramonium*
—— *fastuosa*
Hyosciamus *Scopolia*
——— *physalodes*
Ribes *nigrum*
Celosia *cristata*
Beta *vulgaris*
Chenopodium *bon. Henri.*
——— *rubram*
Chenopodium *murale*
——— *album*
——— *Botrys*
——— *ambrosioid*
Gomphrena *globosa*
Ulmus *campestris*
Alsine *media* *
Berberis *vulgaris*
Rumex *obtusifol*
—— *scutatus*
—— *acetosa*
Triglochin *palustre*
Petiveria *alliacea*
Alisma *plantago aquatica*
Daphne *mezereum*
Stellera *passerina*
Polygonum *amphibium*
——— *persicaria*
——— *orientale*
Laurus *nobilis*
Cassia *marilandica*
Tribulus *terrestris*
Monotropa *Hypopith*
Scleranthus *annuus* *
——— *perennis* *
Gypsophila *muralis*
Saponaria *officinalis*
——— *Vaccaria* *
Dianthus *barbatus* *
——— *carthusianorum*
——— *armeria* *
——— *prolifer* *
——— *caryophyl* *
——— *superbus* *
——— *plumcrius* *
——— *pungens*, Lin. Mant. *
——— *ferrugineus*, ibid *
Cucubalus *Behen*
Silene *nutans* *
—— *quinquevuln* *
—— *noctiflora* *
—— *armeria* *

Stellaria *Holostea* *
——— *graminea* *
——— *aquatica*, Poll. Pal. *
Arenaria *serpillifol* *
——— *saxatilis*
Malphigia *urens*
Agrostemma *Githago* *
——— *Coronaria*
Lychnis *chalcedonica*
——— *Flos cuculi* *
——— *dioica*
Cerastium *viscosum* *
——— *arvense*
——— *aquaticum* *
Spergula *arvensis*
Forskohlea *tenaciss*
Portulaca *oleracea*
——— *Anacamps*
Cactus *Opuntia*
——— *Tuna*
Mesembryanth *hispidum*
——— *teniufolium*
——— *acinaciforme*
Thalictrum *sibiricum*, panicula multiplici, pendula, foliolis circumscriptione subrot. trifid. stigmate seminum membranaceo.
Thalictrum *sibiricum* caule ramosiss, flexuoso, panicula multiplici subnud. foliolis oblong. trifid, laciniis acutior. rectis.
Ranunculus *polyanth*
——— *acris*
Lantana *Camara*
Orobanche *major*
Ruellia *biflora*
Hermannia *hyssopifolia*
Geranium *papilionac*
——— *zonale*
——— *odoratissim*
——— *malacoid*
——— *robertian*
——— *molle*
——— *dissectum*
——— *sanguineum*
——— *columbinum*
Fumaria *fungosa*
Phaseolus *vulgaris*, a.
Dolichos *Lablab*
Psoralea *bituminosa*
Abroma *angusta*
Jasione *montana*
Aristolochia *clemat*
Arum *dracunculus*
——— *maculatum*
Coix *Lacryma Jobi*
Betula *alba*
Buxus *sempervirens*
Urtica *urens*
——— *dioica*
Xanthium *strumarium*
Amaranthus *caudat*
——— *sanguineus*
——— *hypocondriac*
Myriophyllum *spicatum*
——— *verticillat*
Sagittaria *sagittifol*
Poterium *Sanguisorba*
Carpinus *Betul*
Pinus *Larix*
Acalypha *virgin*
Cucurbita *lagenaria*
Myrica *quercifolia*
Spinacia *oleracea*
Cannabis *sativa*
Humulus *lupulus*
Populus *tremula*
Hydrochar, *Mors. ran.*
Cliffortia *ilicifolia*
Juniperus *communis*
——— *phœnecia*
Taxus *baccata*
Parietaria *officinalis*
——— *judaica*
Atriplex *hortensis*
——— *patula*
Mimosa *sensitiva*
——— *nilotica*

(β) *Unequal, and as if crenate.*

Plumbago *scandens*
Ocimum *Basilicum*
Martynia *annua*
Bignonia *Catalpa*
Passiflora *fœtida*
——— *incarnata*
——— *cœrulea*

(γ) *With from two to three prominent umbilici.*

Colutea *arborescens*

(δ) *Bound in the middle by a ring.*

Trapa *natans*

(ε) *Angular.*

Poa *annua*
Festuca *fluitans* *
Herniaria *glabra*
——— *hirsuta*
Juncus *articulatus*
—— *pilosus*
—— *campestris*
Rumex *crispus*
—— *Acetosella*
Thalictrum *minus*
Elycina *Apios*
Betula *Alnus*
Juglans *regia*

ORBICULARLY EGG SHAPED.

Verbena *officinalis*
Hordeum *hexastich*
Triticum *repens*
Festuca *elatior*
Atropa *Belladonna*
Calyncanthus *floridus*
Aconitum *Napellus*
Hermannia *althaeifolia*
——— *lavendulæfolia*
Fumaria *bulbosa*
Zea *Mays*
Tripsacum *dactyloides*
Morus *alba*
Corylus *avellana*
Cupressus *sempervirens*
Holcus *lanatus*

(To be continued.)

PART V.

MEDICAL AND PHYSICAL INTELLIGENCE.

I.—PRIZE QUESTIONS.

Royal College of Surgeons, London.—JACKSONIAN PRIZE.

SUBJECTS.—For the present year, 1814, *Injuries, and Diseases, of Muscle.*—For the next year, 1815, *Diseases of Bone.*

CONDITIONS.—Candidates to be Members of the College.—Dissertations to be in the English language.—Each Dissertation to be distinguished by a motto or device.—Every Dissertation to be accompanied by a sealed paper, containing the name and place of residence of the author; and having, on the outside, a motto or device, corresponding with that on the Dissertation.—No Dissertation, Motto, or Device, to be in the hand-writing of the author; nor sealed paper to bear the impression of his seal.—Dissertations to be addressed to the Secretary, and delivered at the College before Christmas-day in each year.

TRANSACTIONS.—The Board of Curators being authorized by the College to publish, from time to time, whatever communications shall be judged proper for Publication, under the title of "*Transactions of the Royal College of Surgeons in London:*" the members of the College, and other persons, are invited to make such communications to the Board as may conduce to the improvement of anatomical or chirurgical science. And the manuscript of any communication

which shall be considered more proper for reference in the library, than for publication in the Transactions, will be preserved for that purpose.

DONATIONS. — Donations of preparations, specimens, models, casts, manuscripts, printed books, paintings, and chirurgical instruments, will be received by the Board of Curators: and the names of the Donors will be recorded in the catalogue of Benefactors to the College.

Edinburgh Prize Question.—The Royal Medical Society of Edinburgh propose, as the subject of the Prize Essay for the years 1814 and 1815,

" The comparative Specific Caloric of Venous and Arterial Blood."

The prize is a set of books, or a medal of five guineas value. The dissertations are to be in English, French, or Latin. Honorary, extraordinary, and ordinary members alone are invited as candidates.

II.—CHEMICAL INTELLIGENCE.

Composition of Vegetable Acids. — The following are the results of the new experiments of Berzelius to determine the composition of these acids*:

Oxalic Acid	Oxygen	66.211	or 6 atoms
	Carbon	33.021	4
	Hydrogen	0.728	1
Tartaric Acid	Oxygen	59.882	5
	Carbon	36.167	4
	Hydrogen	3.751	5
Saclactic Acid	Oxygen	60.818	8
	Carbon	34.164	6
	Hydrogen	5.018	10
Acetic Acid	Oxygen	46.734	3
	Carbon	46.871	4
	Hydrogen	6.195	6
Succinic Acid	Oxygen	48.08	3
	Carbon	47.40	4
	Hydrogen	4.52	4
Citric Acid	Oxygen	55.072	3
	Carbon	41.290	3
	Hydrogen	3.634	3
Benzoic Acid	Oxygen	20.00	3
	Carbon	74.74	15
	Hydrogen	5.26	12

* The original statement will be found in Schweigger's *Journal für Chemie und Physik*, x. 2. p. 246. We copy from the *Annals of Philosophy*, No. 21. p. 232.

Milk Powder.—In the *Repository*, vol. i. p. 350, we stated that *Kirchoff*, a Russian chemist, had proposed a method of preserving milk by converting it into powder; and detailed several experiments we had made on this powder, stating at the same time our opinion regarding its nature. In the last number of the *Annals of Philosophy*, Dr. Thomson has published the following passages, copied from an old book, and communicated to him by a philosophical friend, to show that Kirchoff's discovery was known many years ago.

" Observatio *Joh. Baptistæ Werloschnigg.*

" Qui hactenus lac suis medicationibus adhibuerint, crudum, excrementis nondum purgatum et in quintam esse deductum, hinc factum ut sæpius ob sui in ventriculo coagulationem enormia eruperint mala; et quia plura et plura in medicinâ nostri ignorarunt antecessores, quæ nos apprime nunc novimus, plurima et nos ignoramus quæ successoribus erunt perspecta: sic nemo medicorum præteritis seculis lac in pulverem redigere, sordibus liberare, illudque cuivis temperamento aptum reddere novit.

" Quod tamen excellentissimus vir meus amicus singularis Dominus Ludovicus Testi, Med. Professor Venetiis, optime novit. Hic enim certo spagyrico (chemical) mysterio *substantiam lactis in pulverem albescentem dulcem* (quod arcanum opportuno tempore in humanæ miseræ solatium se manifestare promittit) *convertit.* Fabrefacit itâque ex lacte vaccino, melius ex muliebri (verum hoc solum principibus et divitibus foret superabile), saccharum et sal lactis, utrumque in quibus acidum et acre peccat, optatissimum, tutissimum, et infallibile remedium, siquidem suis spurcitiis depuratum nec acescit, nec coagulatur, nec corrumpitur, ut facile lacti contingit, et in longos annos asservari potest.—Miscellanea Curiosa; sive Ephemeridum Medico-Physicarum Germanicarum Academiæ Cæsareæ Leopoldinæ Naturæ Curiosorum. Decadis tertiæ, Annus 9 et 10. Obser. 155, p. 282.

" *Pretium Dosis, et Vehiculum Sacchari Lactis.*

" Dum apud manipulatorem pretium indago sequens scripto dedit responsum.

" Quanti hoc remedium divendam, dico a prima usque inventione septimum jam labi annum, librasque fere mille a me fabrefactas, nec tamen unquam granum pretio æstimavi. Generose ego petentibus usque ad ultimos Europæ terminos, immo in Asiam transmisi. Necessarium enim fuit, talem me habere, non solum ut non impostor crederer, verum etiam ut arthritici manifeste comprehenderent, neglecto lucro, gratam mihi primo esse eorum salutem. Cum modo autem de remedii præstantia ab experientiis confirmata satis constet, æquum etiam est, ut divites congruens aliquod munus mihi respondeant. Necessariam ergo subministrabo quantitatem, dummodo singulis mensibus duo aurei Pannonici seu Ungari ab ægroto dono dentur. Hoc certe tenue munus est, quod arthriticus offerret, si actu ego, nullo quamquam propinato remedio, ac sola personâ inviserem.

" *Venetiis*, 1 *Octobris*, 1701. LUDOVICUS TESTI, D.

" Dos a ʒj. ad ʒjss. ʒji. bis, ter, etiam quater in die ex jure, pulte, vel ex infuso theæ, Veronicæ, &c. sumitur."—p. 296, 297.

"*Bricks that swim on Water.*—The ancients possessed the art of making bricks that swam on water. Pliny names Pitane, an Asiatic town; and Calentum and Mazilua, in Spain; as places where the materials of these bricks are found. Fabbroni some years ago discovered a substance from which similar bricks might be made. It occurs at Castel del Piano near Santa Fiora, between Tuscany and the States of the Church. The substance in question constitutes a brown earthy bed mixed with the remains of plants. Haüy gives it the name of *talc pulverulent silicifère,* and Brochant considers it as a variety of *meer schaum.* In Germany it is known by the name of *bergmehl (mountain meal),* in Italy by that of *latte di luna (moon milk).* Klaproth has lately analysed it, and found it composed of

Silica	79
Alumina	5
Oxide of iron	3
Water	12
Loss	1
	100

So that it nearly agrees with a mineral previously analysed by him, to which he gave the name of *kieselguhr.*"—*Ibid.* p. 317.

The *New Nomenclature* of the Edinburgh Pharmacopœia is established throughout North America.

III.—MEDICO-BOTANICAL INFORMATION.

Mr. Pursh relates that the roots of Iris *eristata,* which grows "on the banks of rivers in rocky situations in the mountains of Virginia and Carolina, flowering in May, blue, handsomely crested with yellow; when chewed, at first occasion a pleasant sweet taste, which in a few minutes turns to a burning sensation, by far more pungent than capsicum. The hunters of Virginia, notwithstanding these properties, use it frequently to alleviate thirst."—*Flora Americæ Sep.* vol. i. p. 29.

"On the high mountains of Pensylvania, in shady beech woods, among rotten wood and rich vegetable mould," is found *Viola clandestina,* flowering in June-September. "This singular species of violet produces its flowers, as it were, underground, as they always are covered with rotten wood or leaves. They are of a chocolate brown, very small; the seed vessel buries itself still deeper in the ground, and is large in proportion to the plant. The inhabitants know it by the name of *Heal-all,* being used by them in curing all kinds of wounds or sores."—*Ibid,* i. p. 173.

Dr. A. Blanchard, of Pembroke, New Hampshire, states, that the seeds of the *Delphinium consolida* (larkspur) are a powerful and efficacious remedy in spasmodic dyspnœa. A tincture of them is made by infusing one ounce of the bruised seeds in a pint of proof spirit. The common dose for an adult is from ten to twenty drops three times a day; increasing it as there may be occasion. Large doses nauseate, produce a slight diarrhœa, and sometimes a

profuse perspiration, and is highly diuretic. Dr. B. thinks it preferable to digitalis; except in cases where it is necessary to diminish arterial action.

Colchicum Autumnale.—Mr. WANT, Surgeon, has informed the public, that he has discovered the composition of the *Eau Medicinale d'Husson*, and that it is an infusion of the Colchicum Autumnale. Mr. W. says he has frequently given it in cases of gout, with precisely similar effects.

IV.—MEDICO-SURGICAL INFORMATION.

Puerperal Fever.—We have heard that this disease has been epidemic in Berkshire, Oxfordshire, &c. in the same manner as it has prevailed within the last two years in Yorshire, Durham, and Northumberland; and that it has been very fatal. This is a subject of serious interest to society; and if there be any truth in the report, we earnestly entreat the medical practitioners resident in these parts to publish, without loss of time, the history and progress of the disease, and the treatment that has been pursued, that the public may have the benefit of their experience.

Reunion of separated Parts.—DR. BALFOUR, of Edinburgh, has reprinted, in the form of a pamphlet, two very interesting cases, first published in the Edin. Medical and Surgical Journal, on the *reunion of separated parts.* The second, and most curious, of these cases displays the powers of Nature in a degree, which, were the evidence not perfectly unimpeachable, could scarcely be credited. George Pedie, a carpenter, had struck off, with the blow of a hatchet, one half of the index of the left hand. Leaving the amputated part where it fell, he went to have the wound dressed by Dr. Balfour, who immediately dispatched another workman that had accompanied him to bring the part; and, after pouring "a stream of cold water on both wounded surfaces, to wash away the blood from the one, and any dirt from the other, applied, with as much accuracy as possible, the wounded surfaces to each other, and bound up the finger." Twenty minutes had elapsed from the moment of the accident until this was effected; the piece of finger was white and cold; "and looked and felt like a piece of candle." The parts were put together on the 10th of June; and, except on the next day when the wound was still bleeding, Dr. B. did not see the patient until the 4th of July. The ridicule of his acquaintances having lessened his belief in the assurances of Dr. Balfour that reunion would take place, induced him to apply, on the 12th of June, to another practitioner, with the view of having the bandages removed. His request, after some hesitation, was complied with, when it was found *that adhesion had even then taken place*; and at the time when Dr. B. again saw the patient it was complete, and the finger has now recovered both heat and sensation. "In the progress of the cure," says the Doctor, "the skin was changed, and, soon after the accident, the nail fell off; but I have not the smallest doubt that it will likewise be renewed."

This fact is equalled only by one, which we remember is related by the learned Taliacotius! Some young men, who, with this renowned surgeon, had spent the evening together, being flushed with the

Tuscan grape, quarrelled on leaving the tavern. In the affray swords were drawn; and the nose of one of the party was cut off. The assailant fled, and was pursued by his opponent, regardless of his nose, which had fallen into a gutter: it was, however, picked up and washed by Talicotius, who, on the return of the owner, immediately applied the wounded parts accurately together, and bound the detached part firmly upon the other; so that adhesion soon took place: and this important feature remained during life a sightly and useful nose to its owner, and a living monument of the skill of Talicotius.

Warm Bath for Horses.—M. TORCHON has invented a warm bath for horses, which is constructed in the following manner:—The bath is sunk in the ground, the top of it being even with the surface, and above is a wooden platform, pierced with a great number of small holes and supported by two moveable cross pieces, serving as the base of a frame, which is suspended at the end of a lever, by means of a hook and four iron rods united at the hook. The horse is placed on the platform, suspended in the frame by two girths, and then raised by means of a windlass at the end of the lever: the two cross pieces which support the platform are withdrawn, the windlass is turned, and the horse descends into the bath, where a thermometer is placed, and into which, water, either cold or warm, may be introduced by two cocks.

Aneurism.—The operation for Aneurism of the carotid artery has been performed for the first time in America by Dr. Post of New York, and with success.

Small Pox.—In the town of Boston, North America, containing a population of 33,000, one person only died of Small Pox during the year 1812; and in 1813, none!! It is singular; but Measles are not mentioned in the Bills of Mortality for the above years.—*Quere,* Is it possible that Measles did not occur?

Longevity.—Sarah Anderson, a free black woman, a native of Congo, died on the 20th of September, 1813, at Providence Grove, St. John's, Jamaica, at the age of 140 years. She arrived on the island of Jamaica in 1687, during the government of the Duke of Albermarle; she was then, according to her own statement, about 14. For the last three years of her life she was bed-ridden, but retained a good appetite, could hear and see to the last moment of her existence. She has left 55 children and great grand children, and 25 great great grand children. *** This instance of extraordinary longevity is inserted with a view to direct further evidence of the fact; and may perhaps induce some of our West-India correspondents to inquire into the actual duration of life among the natives of Africa, when imported to that country.—The evidence of the extraordinary longevity of Phillis Wheatly (172 years), who died about the middle of the last century in America, was, we believe, sufficiently credible. Should it be found that many of the negroes arrive at a very great age, it will be a curious fact in the history of this race.—A WOMAN, named Eve Quacher, is said to have lately died at Presburg, in Hungary, at the age of 123 years. Her sight remained perfect,

her hair had not become grey, and she retained her mental faculties to the last. The difficulty of ascertaining the real time of the birth, renders all these instances of extraordinary longevity very doubtful.—A NEW YORK Paper of July 9, states, that Henry Brown, a native of New Jersey, *now* residing a few miles below Beavertown, born January 1686, is in his 129th year. He is a black, with long straight hair: he was in General Braddock's defeat in 1755. He has been a slave 70 years, and a free man 58 years.

MR. STEVENSON purposes recommencing his Annual Course of Lectures on the Anatomy, Physiology, and Pathology of the Eye and Ear, early in January, at his house, Great Russel Street, Bloomsbury; where further particulars may be obtained.

V.—LITERARY NOTICES.

THE following are preparing for publication:—

A System of Anatomy, by Dr. John Gordon of Edinburgh.

The 2nd Fasiculus of Dr. Farre's Morbid Anatomy of the Liver.

Observations on Apparent Death from Drowning, Hanging, &c. by Dr. James Currey

A Practical Treatise on the Physiognomy and Attitude of Patients, and on the Symptoms, Diagnosis, and Prognosis of Diseases, by Dr. Marshall Hall of Edinburgh.

The Fourth Volume of Mr. James White's (of Exeter) Treatise on Veterinary Medicine.

The Fifth Volume of the Transactions of the Med. and Chir. Society of London.

On the Puerperal Fever lately prevalent in Yorkshire, by Mr. Hey, jun. of Leeds.

Dr. Spurzheim's Anatomical and Physiological Examination of the Brain as indicative of the Faculties of the Mind. It will be illustrated by numerous interesting Engravings.

A Translation from the Swedish will shortly appear of a small Work by Professor Berzelius, intitled, An Attempt to establish a Pure Scientific System of Mineralogy, by the Application of the Electro-Chemical Theory and the Chemical Proportions.

Reflections on the Diseases of the Poor for the last ten years; being a Summary of the Cases of upwards of 3000 Patients. By Dr. Trotter, of Newcastle.

Mr. Forster's new edition of his Researches about Atmospheric Phenomena, with very considerable additions. It will be illustrated by Plates.

Mr. J. Wilson is preparing a Translation of *Lorry de Morbis Cutaneis.*

Dr. Johnson, of Bristol, is occupied with a Treatise on the Medicinal Leech, and intends to illustrate his description of this Animal by Engravings.

VI.—AMERICAN LITERATURE.

HAVING been favoured with a series of New England Journals to a recent date, we shall occasionally copy such articles in them as appear worthy of notice*.

New Works announced for Publication in America, in 1813 *and* 1814.

Medical Inquiries and Observations upon the Diseases of the Mind, by Benj. Rush, M.D. 8vo. Philadelphia.

The Philosophy of Experimental Chemistry, by James Cutbush, Professor of Chemistry, Mineralogy, and Natural Philosophy. Philadelphia.

Memoirs of the Columbian Chemical Society. Philadelphia.

Nosologia Methodica; series classium et generum et specierum et varietatem morborum exhibens. Autore J. B. Davidge, A.M. M.D. Baltimore.

The American New Dispensatory, by James Thacher, M. D. 2nd edition, enlarged. Boston.

Medical Papers communicated to the Massachusetts Medical Society. Boston.

A View of the Mercurial Practice in Febrile Diseases, by John Warren, M.D. Boston.

Inaugural Dissertation on the Eupatorium Perfoliatum, by Andrew Anderson, A.B. New York.

---

* The interruption which war occasions to a free intercourse between opposing nations, always reverts each on its native resources, and elicits talents heretofore unknown, and energies untried. This remark is amply illustrated by the following epitome of the progress of American Medical Literature in the space of about eighteen months. Had we the means of examining, it is probable the list of publications is greater than here presented.

Although, as the friends of mankind and promoters of Science, we sincerely rejoice at these proofs of the industry and rapid advancement of our Trans-atlantic Brethren, yet our satisfaction has its alloy.

The former great demand of English works, connected with the science of Medicine from America, always took off many copies, that will, now the Americans re-publish them, find a much more limited sale. These can be published in that country cheaper than in England; and when the present contest is terminated, we fear, this branch of commerce will never resume its pristine prosperity. Few who write on medical subjects ever defray their expences. If the resource and the support to literature in general, which this market afforded, be lost, it may justly be apprehended, that the effect will be fatal to the extension of Medical Science in England.

But there is a cause—a cause perhaps little suspected, that, joined to the great expences, is silently operating to the injury of Medical Literature in Great Britain, and will, we dread, check the laudable zeal of publishing the observations that the intelligent and the experienced might wish to make known for the improvement of the Profession, and for the honour and credit of the professional character. We shall embrace another opportunity of being more explicit.

EDITORS.

Inaugural Dissertation on Angina Pectoris, by Henry Bogart, A.B. New York.

The Literary and Philosophical Repository, a periodical work, by Professor Hall. Middlebury.

Annual Address delivered before the Society for the Promotion of Useful Arts, by Theodoric Romeyne Beck, M.D. Albany.

Professor Cullen's System of Materia Medica, with notes and additions, by Benj. Smith Barton, M.D. 2 vols. 8vo. Philadelphia.

A Treatise on Horned Cattle and their Diseases, by J. Downing. Philadelphia.

A Dissertation on the Natural History and Medicinal Properties of Ergot, by Dr. Oliver Prescott. Boston.

Experiments on the Production of Animal Heat by Respiration, an Inaugural Dissertation, by Enoch Hale, jun. M.D. Boston.

An Inaugural Dissertation on the Medical Properties of Gold, by J. C. Cheeseman. New York.

An Eulogium in Memory of the late Dr. Benj. Rush, by Wm. Slaughton, D.D. Philadelphia.

Review of an Essay on the Bilious Fever prevailing in the State of New York, by C. C. Yates; with additional Remarks, by a Physician. Albany.

Elements of Surgery, by J. S. Dorsey, Adjunct Professor of Surgery, &c. vol. 2.

A Compendious System of Anatomy, in six parts.

A Treatise on the Management of the Teeth, by Dr. Jones, of Boston.

An Anatomical Description of the Arteries of the Human Body, accompanied with fifteen engravings, reduced from the Icones of Haller, and executed on Wood. 8vo.

There are now, likewise, at least a dozen of periodical Medical Journals in the United States.

American Editions of English Medical Works, 1813 and 1814.

Charles Bell's Engravings of the Arteries — Davy's Elements of Chemical Philosophy—John Bell's Principles of Surgery—Thomas's Modern Practice of Physic—Cheyne's Works on the Diseases of Children—Hooper's Surgeon's Vade-Mecum—The London Dissector—John Bell's Anatomy of the Human Body—Moss's Essay on the Management of Feeding Infants—Stone on the Diseases of the Stomach and Indigestion—John Hunter's Treatise on the Blood, Inflammation, and Gun-shot Wounds—Smith's Introduction to Physiological and Systematical Botany—Pharmacopœia Chirurgica—Cullen's System of the Materia Medica—John Bell's Engravings of the Bones and of the Muscles and Joints—Davy's Elements of Agricultural Chemistry—Trotter's Essay on Drunkenness—Henry's Chemistry, 3d edit.—Burn's Principles of Midwifery—Fordyce's Dissertation on Fevers—Hooper's Quincy's Lexicon. *** Some of the above have passed through more than one edition.

Translations.

Corvisart on the Organic Diseases and Lesions of the Heart and Great Vessels—Richerand's Physiology—Bichat's Treatise on the

Membranes in general and different Membranes in particular— Larrey's Memoirs of Military and Campaign Surgery — Senac's Treatise on the Hidden Nature, and the Treatment of Intermitting and Remitting Fevers—Le Gallois' Experiments on the Principles of Life.

A METEOROLOGICAL TABLE,

From September the 21st, to October the 20th, 1814,

Kept at *Derby*, Lat. 52°: 58′ N.—Lon. 1°: 30′ W.

M	D	Therm. Morn.	Therm. Day.	Barom.	Hyg.	Wind,	Rain.	Remarks, &c.
	21	52	64	29 .79	450	SW		Clouds
	22	47	64	.78	450	W		Ditto
	23	38	61	.77	360	Calm S		Fr. Fog, Dull
	24	53	68	.58	343	S	1 .06	Fog, Rainy
S	25	54	64	.79	390	WSW		Light Clouds
	26	47	61	.20	329	S	.32	Dull & Rainy, Gusty W
	27	51	61	.28	389	S	Dew	Pleasant, Heavy Clouds
	28	45	61	.92	352	Calm	Dew	Dull
	29	41	56	30 .12	320	NNE		Fog, Dull
	30	50	56	.16	353	NE		Dull
	1	45	55	.20	426	E		Dull, Clear
S	2	41	54	.26	408	E		Clear
	3	40	55	.33	425	E		Light Clouds
	4	37	56	.35	410	SE		Fr. Dull
	5	37	56	.09	403	Calm E		Fr. Light Clouds
	6	45	55	29 .71	377	Calm S	.01	Dull, Light Rain
	7	38	57	.80	370	E		Fr. Dull
	8	38	52	.98	429	NNW		Fr. Light Clouds
S	9	32	49	30 .10	431	N		Fr. Light Clouds
	10	28	50	.15	434	Calm S		Sharp Frost, Clouds
	11	42	53	29 .69	374	S	.36	Dull, Rainy
	12	45	52	.59	364	S	.03	Ditto Ditto
	13	47	60	.48	367	S		Dull
	14	45	63	.28	407	S		Ditto, Clouds Sultry
	15	50	53	.47	410	S	.10	Ditto, Rain
S	16	45	53	.57	417	W		Rough Winds and Clouds
	17	43	55	.58	362	SSW	Dew	Dull
	18	44	54	.14	316	SSW	.32	Ditto, and Rainy
	19	35	50	.06	365	SES	.61	Rainy, Clouds
	20	37	47	.34	341	N		Clouds

Rain fallen in Sept, 1.49 inches.

On the 24th, at 9 P. M. a very heavy shower began, attended with loud thunder and very vivid lightning; 8-10ths, of an inch of rain fell before 10 o'clock. The barometer fell 59-100ths, between the 25th and 26th, and rose 64-100ths, between the 27th and 28th. This September was 3° warmer on a mean, than the mean of the last twenty years. On October 10th, we had a very sharp frost, which destroyed all the tender vegetables and flowers.

No. 11. Vol. II.

A REGISTER of the DISEASES of LONDON between September 19th and October 20th, 1814, for the London Medical, Surgical, and Pharmaceutical Repository.

DISEASES.	1 S. W.	2 S.	3 S. E.	4 E.	5 N. E.	6 N.	7 N. W.	8 W.	9 Surry side W	10 Surry side E.	11 Hamp Highg	No. of Cases.	Fatal.
Anasarca	4		1		5	2	4		2	2		20	1
Ascites	1		3	4	3	4	3	1	1			20	3
Asthma	9	9	8	4	8	5	13	1	4		7	68	3
Acne	5				1				1	1		8	
Apoplexia			2			2	1		1			6	1
Aphtha		3		1	9	4		1	2	3		23	
Amenorrhœa	6	4		4	1		1	1	5	1	4	27	
Asthenia	2			3	13	8	1		7	4		38	
Abortio	1	1		3	2	2	2	2	1	3	1	18	
Bronchitis acuta			1		1		3			3		8	2
——— chronica	3				3							6	
Cancer					2		1					3	1
Cancrum Oris	2											2	
Chlorosis	5	4		3		1			3		5	21	
Cholera		4	3	3	4	1	18	1	7	4	2	47	
Chorea	2								1			3	
Cephalalgia	10	11	3	2	5	3	8	1	9	5	3	60	
Colica	13	8	1	12	1		3	6	4	1		49	
Catarrhus	24	21	18	22	21	8	27	22	10	12	6	191	
Convulsio	3	7		2	1	2				1	2	18	2
Carditis	1	2		2								5	
Cynanche Tonsillaris	3	3	1	5	7	6	5	11	6	2	8	57	
——— maligna	1			1			1					3	
——— Trachealis					1			2		1	1	5	
——— parotidea			1									1	
Dysenteria	3	3			7		8	1	4			26	
Diarrhœa	6	22	15	16	17	13	24	11	18	17	22	181	1
Dyspnœa	12	2	3	4	2	2		2	2			29	
Dyspepsia	13	17	7	13	10	3	19	17	14	12	11	136	
Dysuria		1		3	2	1	1	1				9	
Ecthyma				1	1							2	
Eczema										3		3	
Erythema					3				1			4	
Erysipelas	3	2	3	11	3	6	6	3	5	4	4	50	
Enteritis	3	3		2			1				1	10	4
Entrodynia		13							3	4	5	25	
Enuresis					1							1	
Epilepsia	2	2	1		2	2	1			2		12	
Epistaxis	1								1			2	
Febris remittens	11	34	1		8	3	2	9	6	14	7	95	
——— intermittens	3	6	1	6	1	1	2		4	3		27	
——— puerpera				1				2		2		5	
——— synocha		9	1						2			12	
——— synochus		8	2		2		2		1			15	
Gastritis						1	2					3	
Gastrodynia	11	9		4	1		1	1	4	6	4	41	
Hæmatemesis		1	1		1	4	1					8	
Hæmoptoe	10	2	3	3	1	4	2					25	
Hæmorrhois	4		1		6	3	4	1	5	5		29	
Hepatitis	1			6	3	2			3	2		17	2
Hysteria	1	4		3	4	8	4	4	5	1	3	37	
Hydrocephalus		1	1		1	2		1		1		7	6
Hydrothorax					1	4						5	2

DISEASES.	1 S. W.	2 S.	3 S. E.	4 E.	5 N. E.	6 N.	7 N. W.	8 W.	9 Surry side W	10 Surry side E.	11 Hamp Hghgi	No. of Cases.	Fatal.
Herpes	5	8	3	4	3	6	5	2	4	1	4	45	
Hypochondriasis	4	2			5		1	3	4		1	20	
Icterus	3	2	1	1		1	4	2	2	1		17	
Impetigo					1			2				3	
Ischuria		1	1	1	1	2	1	1				8	
Leucorrhœa	7		1	2	7				3	1	2	23	
Lithiasis							1					1	
Lepra	1			1	1	1				1		5	
Lichen					4				1			5	
Mania		1				2	2					5	
Menorrhagia	9	5		7		4	9	4	3	5	2	48	
Morbi Infantiles*	8	10	19	1	16	7	7	36	19	51	10	184	1
——— Biliosi	4	13	29	2	19	12	13	16	21	39	6	174	
Nephritis				2	1		1	2		1		7	
Obstipatio	3	3	2	11	6	8	9	3	2		5	52	1
Ophthalmia	5	3	2	3	6	4	11	3	4	8	5	54	
Phlogosis	2		1			2						5	
Paralysis	2	1		2	2	6	5	1	2			21	1
Phthisis Pulmonalis	5		3	4	4	3	4			3		26	17
Pertussis		4	3	5	4	2		4	3	2		27	5
Peritonitis		3		2			4		1			10	1
Phrenitis							1	1		1		3	
Pneumonia		4	6	5	4	2	8	3	4	10	2	46	6
Pleuritis	1		1		2		1			1		6	1
Pleurodyne			2				2		1			5	
Podagra	1	2		5	5	4	1	4	2	1		25	
Porrigo larvalis						1			2			3	
——— scutulata	2	5			2							9	
——— favosa			1		3							4	
Psoriasis	6			1	3	2			4			16	
Pyrosis				2			1		1	1		5	
Rheumatis. acut	7	5	5	9	14	5	25	3	6	2	2	83	
——— chron.	6		6	6	18	7	21	6	8	7	4	89	
Rubeola		4	5	7	20	12	1	2	7	9	5	72	2
Scabies	2		2	8		7	24		4	3		50	
Scarlatina simplex.	3	3	1	1					1	2		11	
——— anginosa				2	1	2	1	5		1	1	13	
Singultus	1											1	
Sycosis	1					1						2	
Scrofula	7			1	2	4			3	3		20	
Scorbutus				1								1	
Tabes Mesenterica	1						1	1		2	3	8	2
Trismus										1		1	
Typhus		4	2	7	7	6	2	1	3			32	3
Variola		1	4	9	6	3	1	1				25	7
Varicella	1		4	1	4	3	8		2	5		28	
Vermes		1	8	6		8	1		5	9	2	40	
Vertigo	8		3	6		4	6	8	7	8	3	53	1
Urticaria			2	1	1			3		2	2	11	
Total No. of Cases	284	301	199	270	337	238	351	220	271	300	155	2926	
Total of Deaths													76

* *Morbi Infantiles* is meant to comprise those Disorders principally arising from dentition or indigestion, and which may be too trivial to enter under any distinct head; *Morbi Biliosi*, such Complaints as are popularly termed *bilious*, but cannot be accurately classed.

☞ The Editors will be infinitely obliged to their Reporters, if on the backs of their Registers they will insert any disease not mentioned in the list, and briefly notice any thing remarkable in the cases, or in the remedies applied. It is particularly requested that the fatal termination of every disease reported in the previous or present table be carefully noted in the column for Deaths.

Hooping-cough is on the decline; but it has lately been much more severe, and has proved fatal in five out of twenty-seven cases. Erysipelas and Measles are more prevalent; the latter is chiefly confined to the fifth or north-east, and sixth or north districts. Small Pox, in the fourth and fifth districts, has been peculiarly fatal.

One case of Varicella was that species named Conglobata by Willan, or Hives in common language.

The cases of Cancrum Oris occurred in two children; the youngest of which was first affected, and communicated the disease to the elder. Purgatives of calomel, followed by castor oil, with a light tonic of infusion of cascarilla bark, warmed with tinct. cinch. soon subdued the symptoms. Mel Boracis was used as a local remedy.

The case of Singultus was of a very singular character, and had been of very long standing, having occurred at short intervals for upwards of three years. The patient's habit of body was spare and delicate; the countenance sallow, and the eyes sunk in their sockets. The account given was, that she had been frightened, and the Singultus had immediately supervened. The attack now came on regularly every morning about eight o'clock, and stopped at seven in the evening. Blood was expectorated during the day, and nothing could be swallowed while the paroxysm was present. The tongue was clear, the pulse ninety but not hard. The urine was suppressed during the fit, and was obliged to be drawn off every evening.

This spasmodic affection was apparently rather seated in the lower portion of the œsophagus than the diaphragm; and it is probable that the cardiac orifice of the stomach was completely closed, otherwise it must have been accompanied with vomiting, as the convulsive action very much resembled that prefatory to vomiting; and during the hiccup nothing could be made to enter the stomach, but was rejected before reaching it. It was also accompanied by that variety of Ischuria Vesicalis, named Cystopastica by Sauvages.

As she had been attended by many practitioners, and had found no benefit from any thing but large doses of opium, this was given to the extent of ten grains in the interval, combined with superacetate of lead, in doses of a quarter of a grain. The bowels were kept open by means of castor oil. This plan was pursued for a few days with little advantage, when circumstances withdrew the patient from the care of the Reporter.

Three cases of Herpes præputialis have occurred, two of which were mistaken for Chancre, and have in consequence had an exceedingly protracted cure.

Three cases of acute Rheumatism occurred in one family, (a shoeing smith,) and in the men who were employed in the business. Is this trade in any way productive of this disease?

One of the cases of Porrigo favosa, formerly reported, still remains uncured; although it has for short intervals appeared to have been subdued. The only cause that can be assigned for this protraction of the disease, is, that the patient being a mercantile man, his mind is often distressed; and he himself has noticed the renewed attacks to follow these states of sudden mental depression.

On Sept. 27th occurred a spasmodic affection of the muscles of the jaw, producing complete Trismus, which continued about four hours. The subject of it has been attacked in a similar way before; and as the paroxysm goes off, occasionally there comes on an incessant retching, harass-

ing the patient for many hours. At one period it was troublesome for more than thirty hours. A full dose of opium in this last instance afforded relief.

Examinations post mortem.—In a fatal case of Anasarca, Erysipelas of the legs took place, and ended in Gangrene. In this subject there was ossification of the aorta and of other arteries. Another instance of Erysipelas occurred in a case of Typhus petechialis. On examining one who died of Hydrothorax, the aorta, mitral valve, and left side of the heart were found ossified. A case of Phthisis suddenly terminated from Hæmoptoe. It was remarked, that the matter of an abscess in the lungs was fetid, and smelt like garlick, as if it came from an abscess of the liver; but this last viscus was sound. One of the fatal cases of Enteritis was from incarcerated scrotal hernia; the operation not being permitted.

The propriety of bringing on premature labour in cases of distortion of the pelvis, which has been recently so judiciously recommended by Dr. Merriman, is now so universally admitted and practised, that possibly the following case may not have sufficient of novelty to give it much interest. Still it may encourage the timid and wavering, and thus be productive of advantage. Mrs. ——, about three years ago, was taken in labour with her first child, before the usual period of gestation was concluded. Upon examination it was found, that the space between the pubis and sacrum was preternaturally short. But after being in labour forty-eight hours, she was delivered of a living child, but not so large a one as is common at seven months. In the second pregnancy she went her full time; but when labour came on, the child being of full growth, after suffering as long as with the first, the child was obliged to be destroyed to save the mother.

It was advised, if Mrs. —— again became pregnant, to submit to an attempt to bring on premature labour. This was consented to; and between the seventh and eighth month of the third pregnancy the membranes were ruptured; pains followed in about forty hours. In about four hours more from that period, a healthy small child was born, and soon after a twin. The mother and children did remarkably well.

Monthly Prices of Substances *employed in* Pharmacy.

		S.	D.
Acaciæ Gummi elect.	lb.	3	6
Acidum Citricum	-	34	0
—— Benzoicum	unc.	6	6
—— Sulphuricum	P. lb.	0	8
—— Muriaticum	-	2	0
—— Nitricum	-	4	0
—— Aceticum	cong.	4	6
Alcohol	M. lb.	4	6
Æther sulphuricus	-	10	6
—— rectificatus	-	12	0
Ærugo	lb.	6	0
Aloes spicatæ extractum	-	6	0
— vulgaris extractum	-	5	6
Althææ Radix	-	1	3
Alumen	-	0	5
Ammoniæ Murias	-	2	6
—— Carbonas	-	4	0
Amygdala dulcis	-	5	6
Ammoniacum (Gutt.)	-	8	0
—— (Commun.)	-	3	6
Anthemidis Flores	-	2	3
Antimonii oxydum	-		
—— sulphuretum	-	1	0
Antimonium Tartarizatum		6	6
Arsenici Oxydum	-	1	0
Assafoetidæ Gummi-resina	lb.	6	6
Aurantii Cortex	-	4	6
Argenti Nitras	unc.	6	9
Balsamum Peruvianum	lb.	30	0
—— Tolutanum	-	20	0
Benzoinum elect.	-	10	0
Calamina præparata	-	0	6
Calumbæ Radix	-	3	6
Cambogia	-	12	0
Camphora	-	9	6
Canellæ Cortex	-	5	6
Cardamomi Semina opt.	lb.	12	[illegible]
Cascarillæ Cortex	-	3	6
Castoreum	unc.	5	[illegible]
Catechu Extractum	lb.	2	4
Cetaceum	-	3	0
Cera alba	-	4	0
—— flava	-	3	6
Cinchonæ cordifoliæ Cortex (yellow)		8	6
—— lancifoliæ Cortex (quilled)		10	6
—— oblongifoliæ Cortex (red)		16	0
Cinnamomi Cortex	-	20	0
Coccus (Coccinella)	unc.	4	6
Colocynthidis Pulpa	lb.	8	6
Copaiba	-	7	[illegible]

		S.	D.
Colchici Radix		3	6
Croci stigmata	unc.	4	6
Cupri sulphas	lb.	1	0
Cuprum ammoniatum		14	0
Cuspariæ Cortex		4	0
Confectio aromatica		10	0
—— Aurantii		3	6
—— Opii		6	0
—— Rosæ Caninæ		2	0
—— Rosæ Gallicæ		2	6
—— Sennæ		1	8
Emplastrum Lyttæ		7	6
—— Hydrargyri		3	0
Extractum Cinchonæ	unc.	3	0
—— Cinchonæ resinos.		5	0
—— Colocynthidis		3	6
—— Colocynthidis comp.		1	6
—— Conii		0	8
—— Gentianæ		0	6
—— Glycyrrhizæ	lb.	4	6
—— Hæmatoxyli	unc.	0	8
—— Humuli		0	6
Extractum Hyosciami	unc.	1	0
—— Jalapæ 2*s.* 0*d.*	res.	3	6
—— Opii		3	6
—— Papaveris		1	0
—— Rhæi		2	6
—— Sarsaparillæ		1	0
—— Taraxaci		0	8
Ferri carbonas	lb.	1	0
— sulphas		1	3
Ferrum ammoniatum		5	0
—— tartarizatum		4	6
Galbani Gummi-resina		10	0
Gentianæ Radix		1	0
Guaiacum		8	0
Hydrargyrus purificatus		5	6
Hydrargyri Oxymurias	unc.	0	9
—— Submurias		0	9
—— Nitrico-Oxydum		0	9
—— Oxydum Cinereum		1	4
—— Oxydum rubrum		6	0
Hydrargyrus præcipitatus albus		0	9
Hydrargyri Sulphuretum rubrum		0	8
Hellebori nigri Radix	lb.	2	6
Ipecacuanhæ Radix		22	0
—— Pulvis		24	0
Jalapæ Radix		7	0
—— Pulvis		7	6
Kino		12	0
Liquor Plumbi Acetatis	M. lb.	1	8
— Ammoniæ		2	6
Linimentum Camphoræ comp.		6	0
Lichen Islandicus	lb.	1	8
Lyttæ		14	0
Magnesia		9	0
Magnesiæ Carbonas		3	6
—— Sulphas, opt.		1	6
Manna optima		7	6
— communis		5	6
Moschus pod, 30*s.*	in gr. unc.	40	0
Mastiche	lb.	6	6
Myristicæ Nuclei		24	0
Myrrha elect.		8	6
Olibanum		3	0
Opoponax		26	0
Opium (Turkey)		32	0
Opium (East India)		31	0
Oleum Amygdalæ	lb.	4	0
— Anisi	unc.	2	9
— Anthemidis		6	0
— Cassiæ		8	0
— Caryophilli		5	6
— Cajuputi		6	6
— Carui		1	9
— Juniperi Ang.		4	0
— Lavendulæ		5	0
— Lini	cong.	7	0
— Menthæ piperitæ	unc.	4	6
Oleum Menthæ viridis Ang.	unc.	4	6
— Olivæ	cong.	23	0
— Olivæ secundum	12*s.* to	16	0
— Pimentæ	unc.	5	6
— Ricini optim.	(per bottle)	10	6
— Rosmarini	unc.	0	9
— Succini 2*s.* 4*d.* ——	rect.	4	0
— Sulphuratum	M. lb.	1	6
— Terebinthinæ		1	9
— — rectificatum		2	3
Papaveris Capsulæ	(per 100)	3	6
Plumbi Carbonas	lb.	0	8
— Superacetas		2	6
— Oxydum semi-vitreum		0	8
Potassa Fusa	unc.	0	9
— cum Calce		0	6
Potassæ Nitras	lb.	1	0
— Acetas		8	6
— Carbonas		1	6
— Supercarbonas		4	6
— Sulphas		1	4
— Sulphuretum		2	6
— Supersulphas		0	6
— Tartras		3	6
— Supertartras		1	10
Pilula Hydrargyri	unc.	0	9
Pulvis Antimonialis		0	3
Resina Flava	lb.	0	5
Rhæi Radix (Russia)		40	0
—— (East India)		16	0
Rosæ petal.		9	0
Sapo (Spanish)		2	6
Sarsaparillæ Radix		7	0
Scammoneæ Gummi-Resina	unc	2	6
Scillæ Radix siccat	lb.	5	6
Senegæ Radix		4	0
Sennæ Folia		7	0
Serpentariæ Radix		24	0
Simaroubæ Cortex		4	6
Sodæ Boras		4	8
— Sulphas		0	10
— Carbonas		7	0
— Subcarbonas		1	8
— — exsiccata		5	0
Soda tartarizata		3	0
Spongia usta		24	0
Spiritus Ammoniæ	M. lb.	4	0
—— —— aromaticus		4	0
—— —— foetidus		4	0
—— —— succinatus		5	0
— Cinnamomi		3	0
— Lavendulæ		4	6
— Myristicæ		3	6
— Pimentæ		3	6
— Rosmarini		4	0
— Ætheris Aromaticus		6	6
— — Compositus		6	6
— — Nitrici		4	0
— — Sulphurici		6	6
— Vini rectificatus	cong.	28	0
Syrupus Papaveris	lb.	2	3
Sulphur		0	8
— Sublimatum		0	8
— Lotum		1	0
— Præcipitatum		1	2
Tamarindus opt.		2	6
Terebinthina Vulgaris		0	10
Terebinthina Canadensis		7	6
Terebinthina Chia		9	0
Tragacantha Gummi		9	0
Valerianæ Radix		1	10
Veratri Radix		1	6
Unguentum Hydrargyri-fortius		5	6
—— —— Nitratis		2	8
—— —— Nitrico-oxy.		3	0
Uvæ Ursi Folia		2	6
Zinci Oxydum		6	0
— Sulphas purif.		2	6
Zingiberis Radix opt.		3	6

Prices of New Phials per Gross.——8 oz. 70*s.*—6 oz. 58*s.*—4 oz. 47*s.*—3 oz. 43*s.*—2 oz. and 1½ oz. 36*s.*—1 oz. 30*s.*—half oz. 21*s.*——The London Glassmen allow 10 per Cent, ready money.——The Manufacturers in the Country, where all Phials are made, allow 27½ discount, at three months credit, (carriage free,) to London.

Prices of second-hand Phials, cleaned, and sorted.——8 oz. 46*s.*—6 oz. 44*s.*—4 oz. 33*s.* 3 oz. 30*s.*—2 oz. and all below this size, 23*s.*—Three months credit. *(By G. Parsons, Crown Street, Soho.)*

English Hirudines, 8*s.* per dozen at Covent Garden Market.

MONTHLY CATALOGUE OF BOOKS.

A Synopsis of the various kinds of Difficult Parturition, with Practical Remarks on the Management of Labour. By Samuel Merriman, M.D. Teacher of Midwifery, &c. 12mo. Callow.

Facts and Observations on Liver Complaints and Bilious Disorders in general, &c. By John Faithorn, Surgeon. 8vo. Longman and Co.

A View of the Comparative Advantages and Disadvantages of the Navy and Army Surgeons, and of the Surgeon in private Practice: together with a proposed Amendment of the Condition of Assistant-Surgeons at their outset in the Navy. By William Cullen Brown, M.D. Edin. Surgeon of H. M. Prison Ship Arve Princen. 1814.

Transactions of the Geological Society, vol. 2. 4°. William Phillips.

A Practical Treatise on Porrigo, or Scalled Head, and on Impetigo, the Humid, or Running Tetter: with coloured Engravings illustrative of the Diseases. By the late Robert Willan, M.D. Edited by Ashby Smith, Member of the Royal Coll. of Surgeons Lond. 4to. Cox and Son.

Cases of Tetanus and Rabies Contagiosa; or, Canine Hydrophobia; with Remarks, &c. By Caleb Hillier Parry, M.D. F.R.S. Underwood.

Observations on Adhesion; with Two Cases, demonstrative of the Powers of Nature to reunite Parts which have been, by accident, totally separated from the Animal System. By William Balfour, M.D. 8vo. Sewed. Underwood.

IMPORTED.

Traité des Maladies Chirurgicales, et des Operations qui leur conviennent. Par M. le Baron Boyer, 8vo. tom. iv. De Boffe.

Histoire de la Guérison d'une Jeune Personne par le Magnétisme Animale, produit par la Nature elle-même. Par un Témoin Oculaire de ce phénomène extraordinaire. Traduit de l'Allemand du Baron Fréd. Charles de Strombeck. Avec une Préface du Dr. Marchard. 8vo. De Boffe.

Ersch Handbuch der deutschen Literatur der Medicin, 8vo. 1814—Kieser Grundzuge der Allgemeinen Pathologie und Theragrie des Menschen, 1813—Copprs Jahrbuchder Staatsarzenei Kunde, 6 vols.—Segnitz Handbuch der Prackt. Arzeneimittellehre. 5 vols. 1813.—Thilenius Medicinische und Chirurgische Bemerkungen, 2 vols. 8vo. 1814.—Bohte.

INDEX INDICATORIUS.

The favours of Mr. Goodlad, Mr. Scott *(with a drawing)*, Mr. Weaver, Mr. Croker, Mr. Watson, Mr. Saunders *by* Dr. Allvey, a Country Practitioner, *&c. are received.*

M. M. *must excuse our declining his communication, unless authenticated by his name and address. We concede to him that "fact is superior to theory;" but we fear we should be justly accused of trifling with our readers, were we to publish all the extraordinary things sent us as* facts, *that rest on anonymous information only.*

We shall at all times be happy to comply with the wishes of our respectable Correspondents, to give an early insertion to their papers. It is our rule to be as impartial in this particular as possible; and since the number of Correspondents so rapidly increases, this is the more requisite. It can be waved only for articles of temporary interest.

Mr. C. *may rest assured, that though we are enemies to controversy, yet the pages of the* Repository *will ever be open to every one who conceives his opinions or observations have been mistaken or misrepresented; provided that it be done in a summary way and agreeably to the rules of decorum.*

The Continuation of Orfila *on Poisons will appear in our next.*

Corrigenda.—In the last Number, for *Dyslochia,* read *Dystocia,* throughout the whole of Dr. Clough's paper. The proof-sheet, which corrected the mis-reading of the printer, having miscarried, the whole impression was printed off before the knowledge of the error arrived.

P. 357, line 8 from the bottom, *read* "The liver, kidneys, large and small intestines."